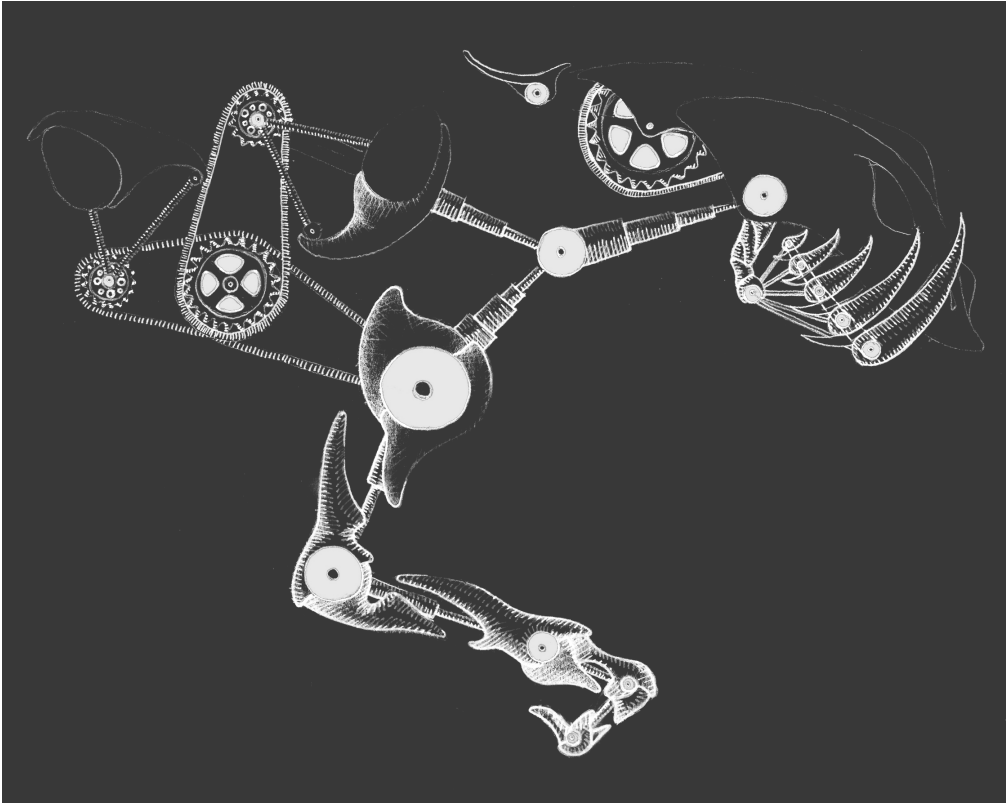


PROCESSING LINES:

EVOKING A CRITICAL CONSCIOUSNESS IN THE
PRODUCTION OF ARCHITECTURAL REPRESENTATION



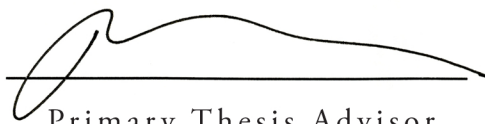
PROCESSING LINES:

EVOKING A CRITICAL CONSCIOUSNESS IN THE
PRODUCTION OF ARCHITECTURAL REPRESENTATION

A Design Thesis Submitted to the Department of Architecture
and Landscape Architecture of North Dakota State University.

by MIKE DAWSON

In Partial Fulfillment of the Requirements for the Degree of
Master of Architecture.



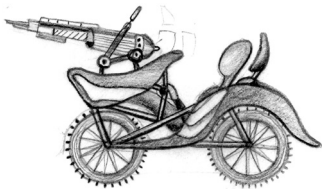
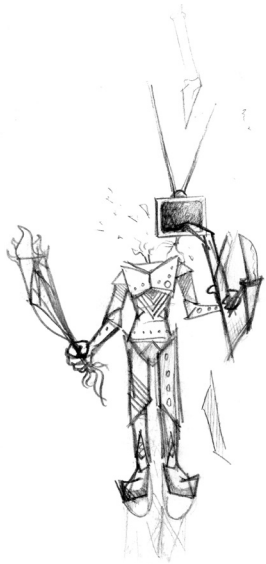
Primary Thesis Advisor

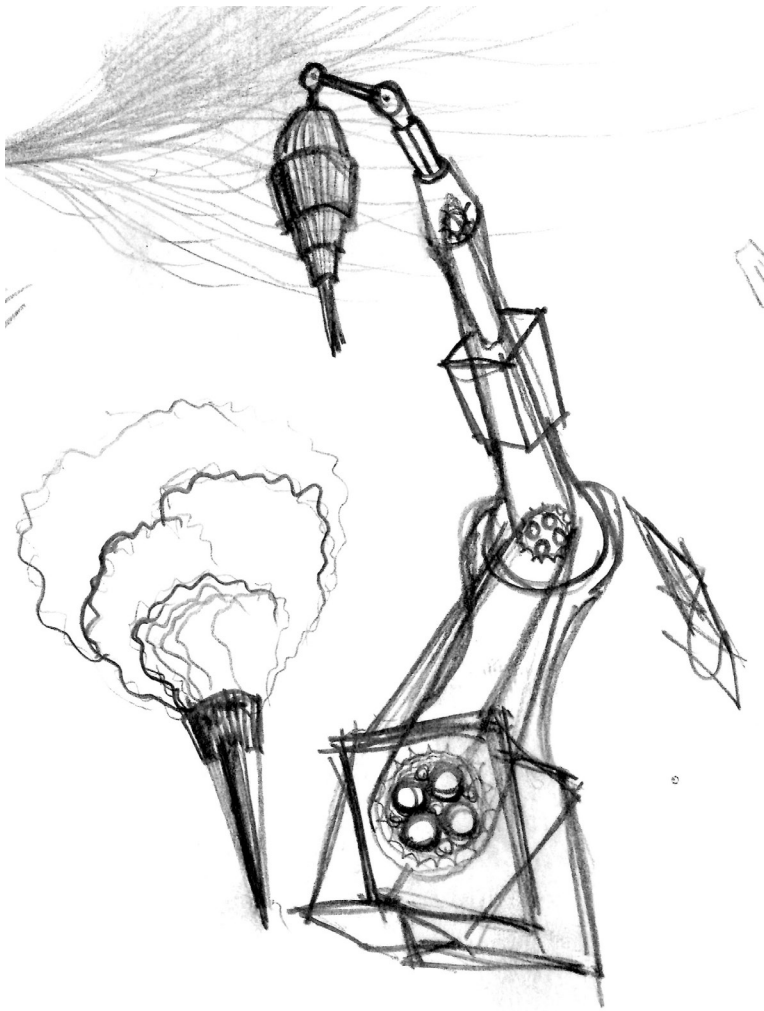


Thesis Committee Chair

CONTENTS

SIGNATURE PAGE	3
TABLE OF CONTENTS	5
ABSTRACT	9
PROBLEM STATEMENT	11
STATEMENT OF INTENT	13
PROPOSAL	17
NARRATIVE	19
USER/CLIENT DESCRIPTION	21
MAJOR PROJECT ELEMENTS	23
SITE INFORMATION	25
PROJECT EMPHASIS	27
PLAN FOR PROCEEDING	29
PREVIOUS STUDIO EXPERIENCE	31
PROGRAM DOCUMENT	33
THEORETICAL RESEARCH	35
TYPOLOGICAL RESEARCH	57
HISTORICAL CONTEXT	75
PROJECT GOALS	85
SITE ANALYSIS	87
PROGRAM REQUIREMENTS	105
PROCESSING LINES	109
REFERENCES	125
PERSONAL INFORMATION	127

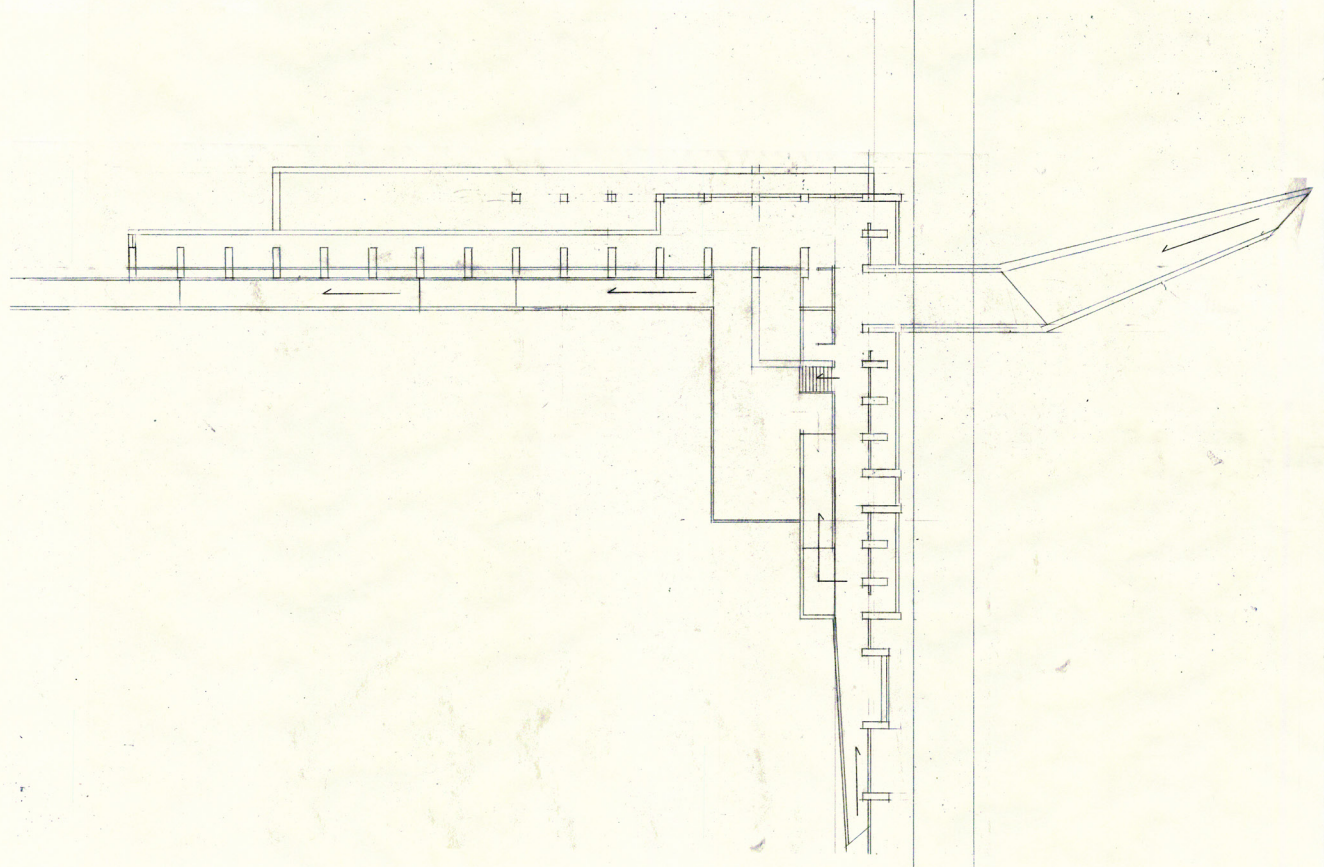




ABSTRACT

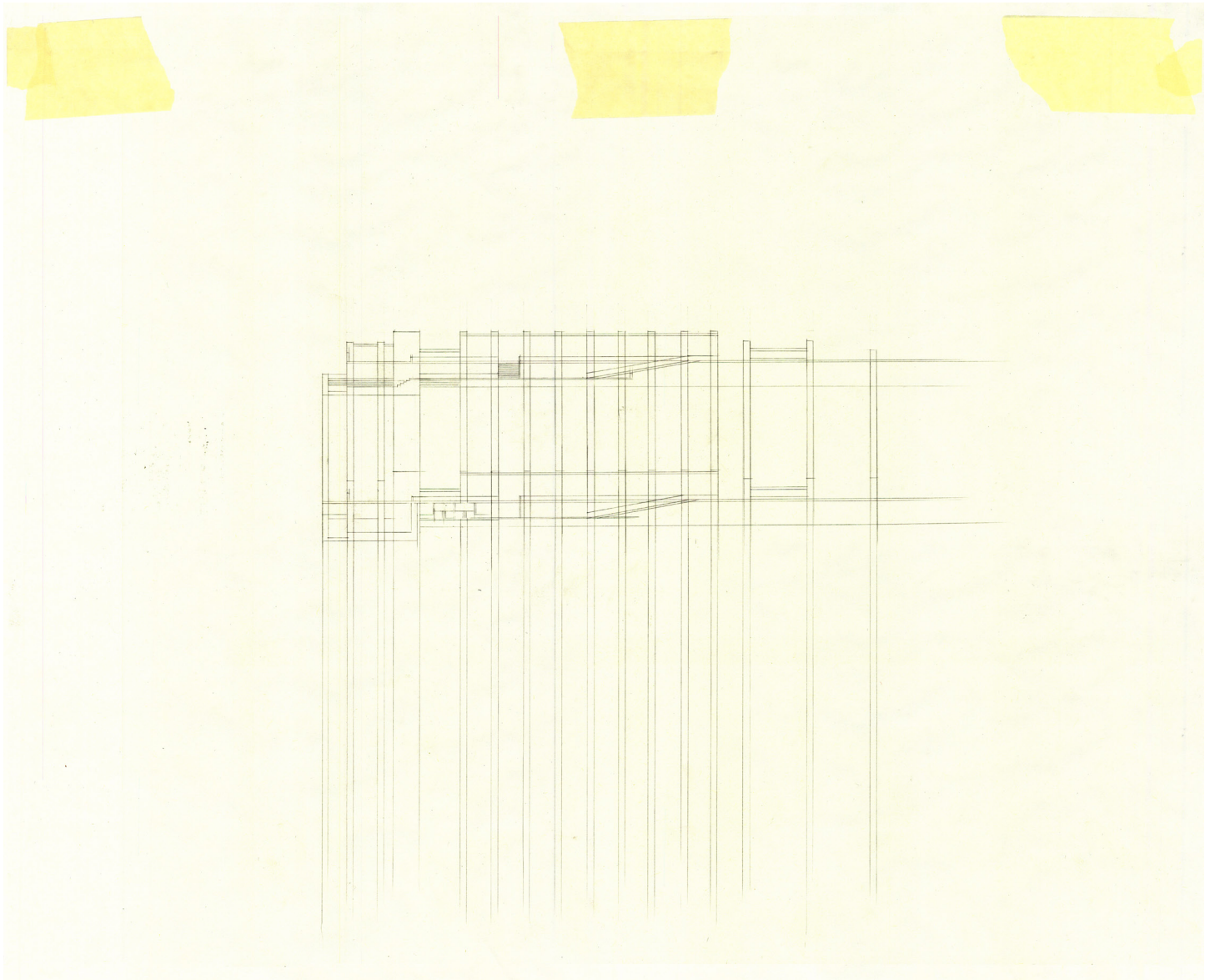
The intention of this thesis is to explore ways in which the emphasis placed on hyper-realistic depictions of reality influence the architects true understanding of the built reality in which he or she lives. The architecture, as representation, will serve as the vehicle in questioning the role of the pencil in architectural representation.

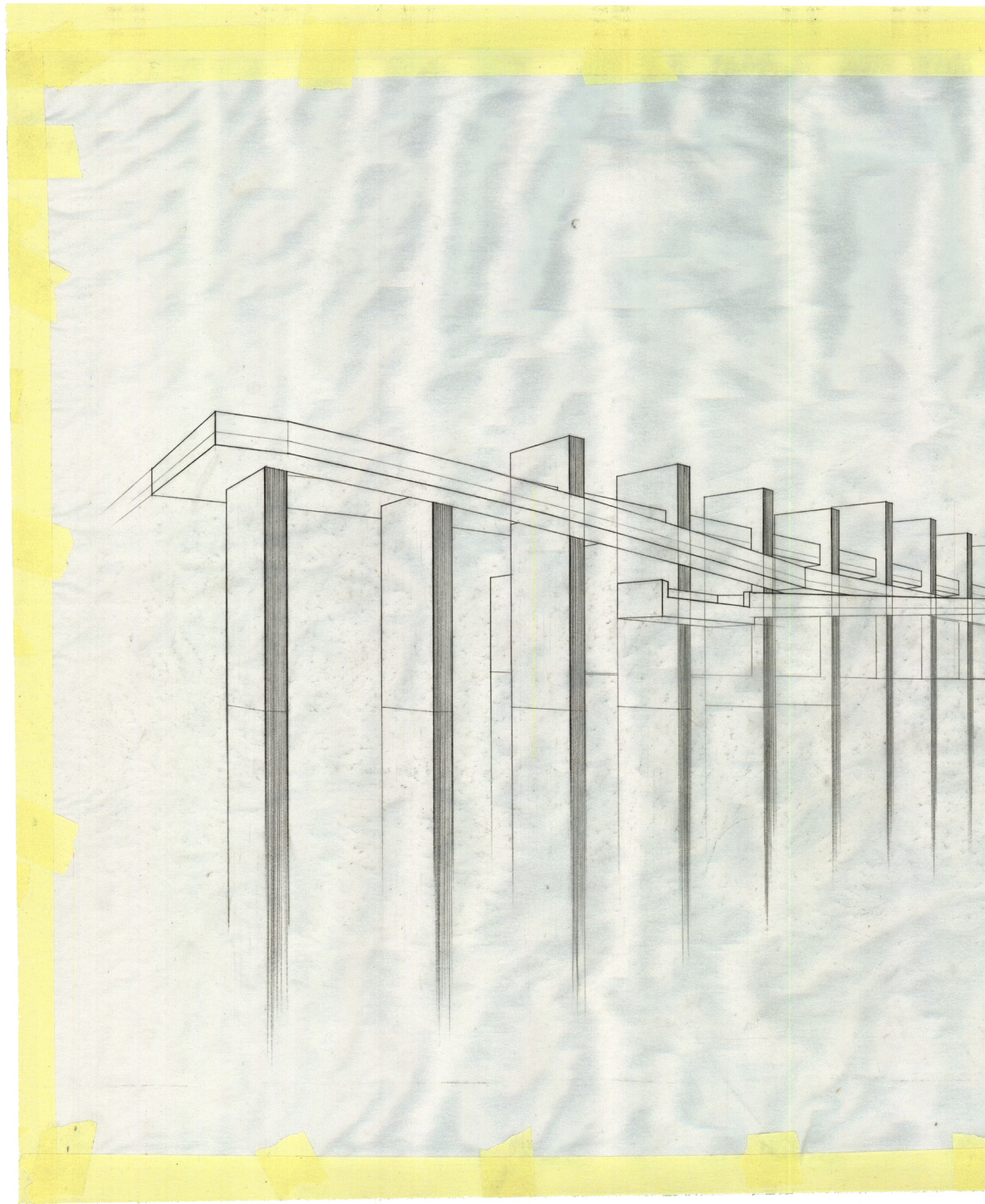
Located in Rock Creek National Park, Washington, Dc, a point of entry will serve as the threshold between two different environments; an area of commercial expansion, and a 1,700 acre National Park.



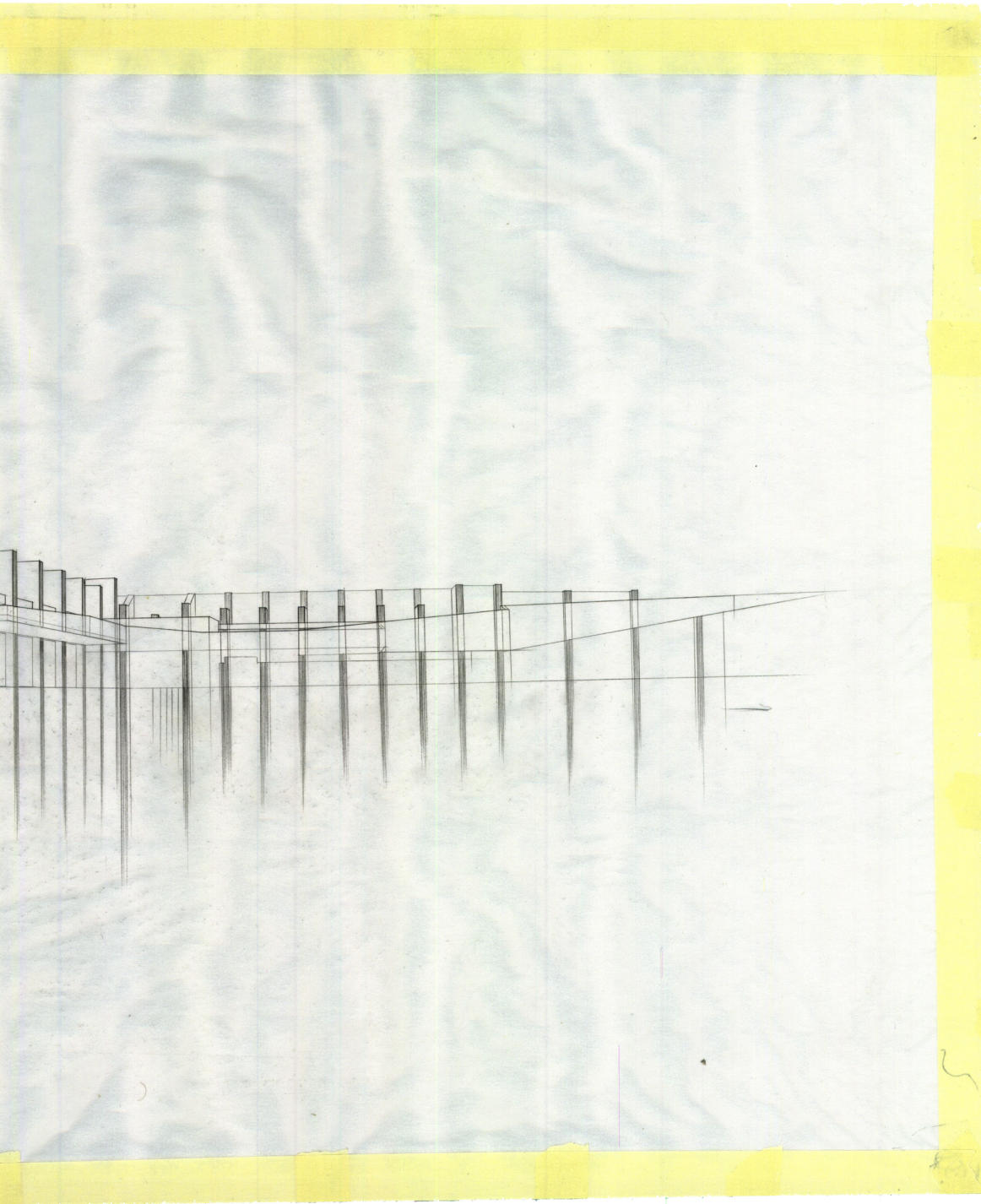
PROBLEM STATEMENT

Does the pursuit of hyper-realistic representation within architectural practice compromise the role of the architect?





STATEMENT



O F I N T E N T

TYPOLGY

Rehabilitation Facility for individuals returning from military service.

CLAIM

Digital representation has substituted the understanding of built form for built form itself. The process of physical creation in architecture allows one to be grounded in the fact that objects are real, and the development of those objects may influence the way an individual views the world and understands their place within it.

PREMISES

Ideas that manifest through physical involvement with tangible and present materials will result in form derived from inherent humanistic intentions (action).

Relying purely on representation of architecture as a substitute for a tangible physical presence (object) perpetuates the self-relying tendency of artificial means of architectural tools.

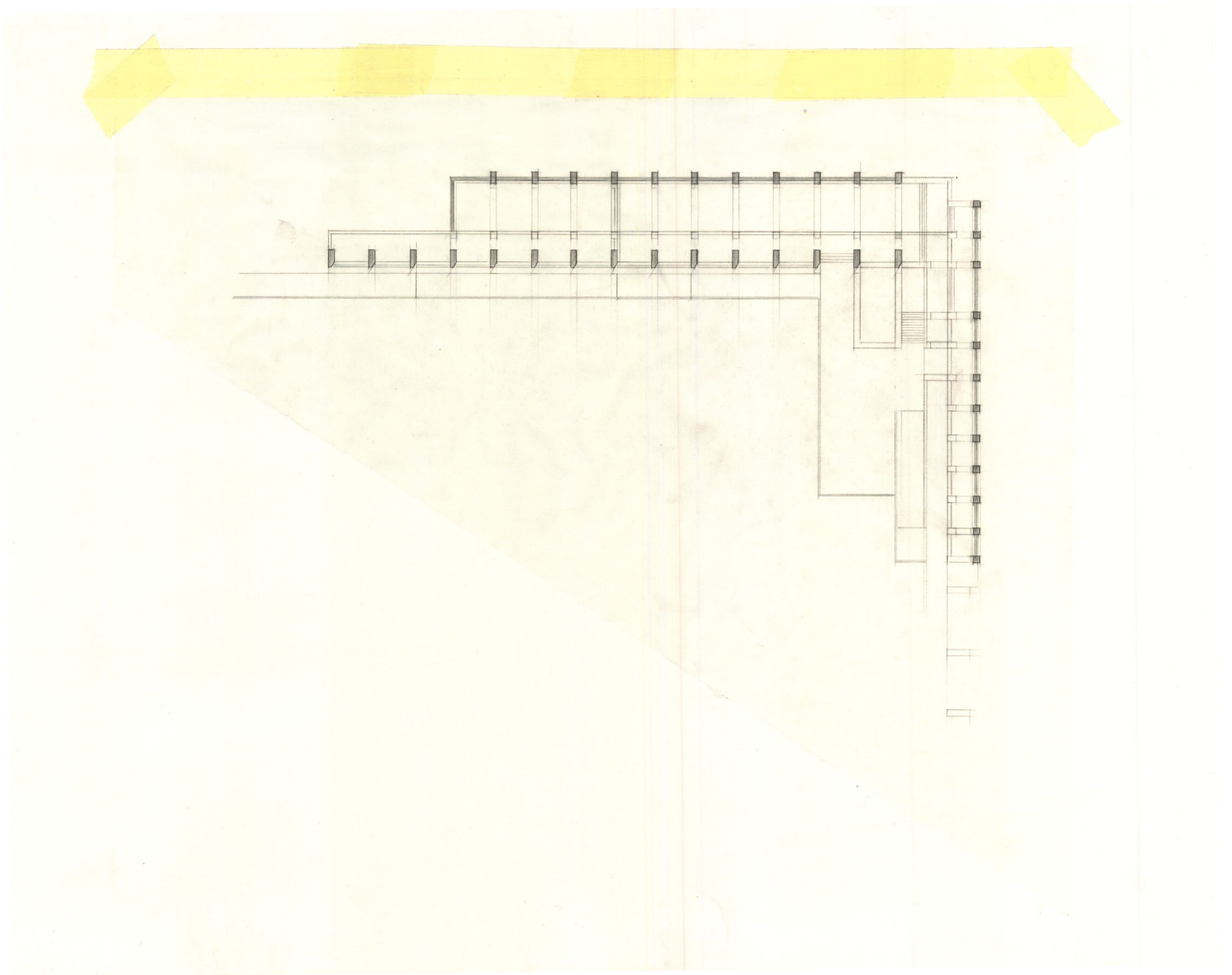
Utilization of tools that are inherently conducive to human involvement may shape our understanding of architecture and affect the way we (actor) respond to the context that surrounds us.

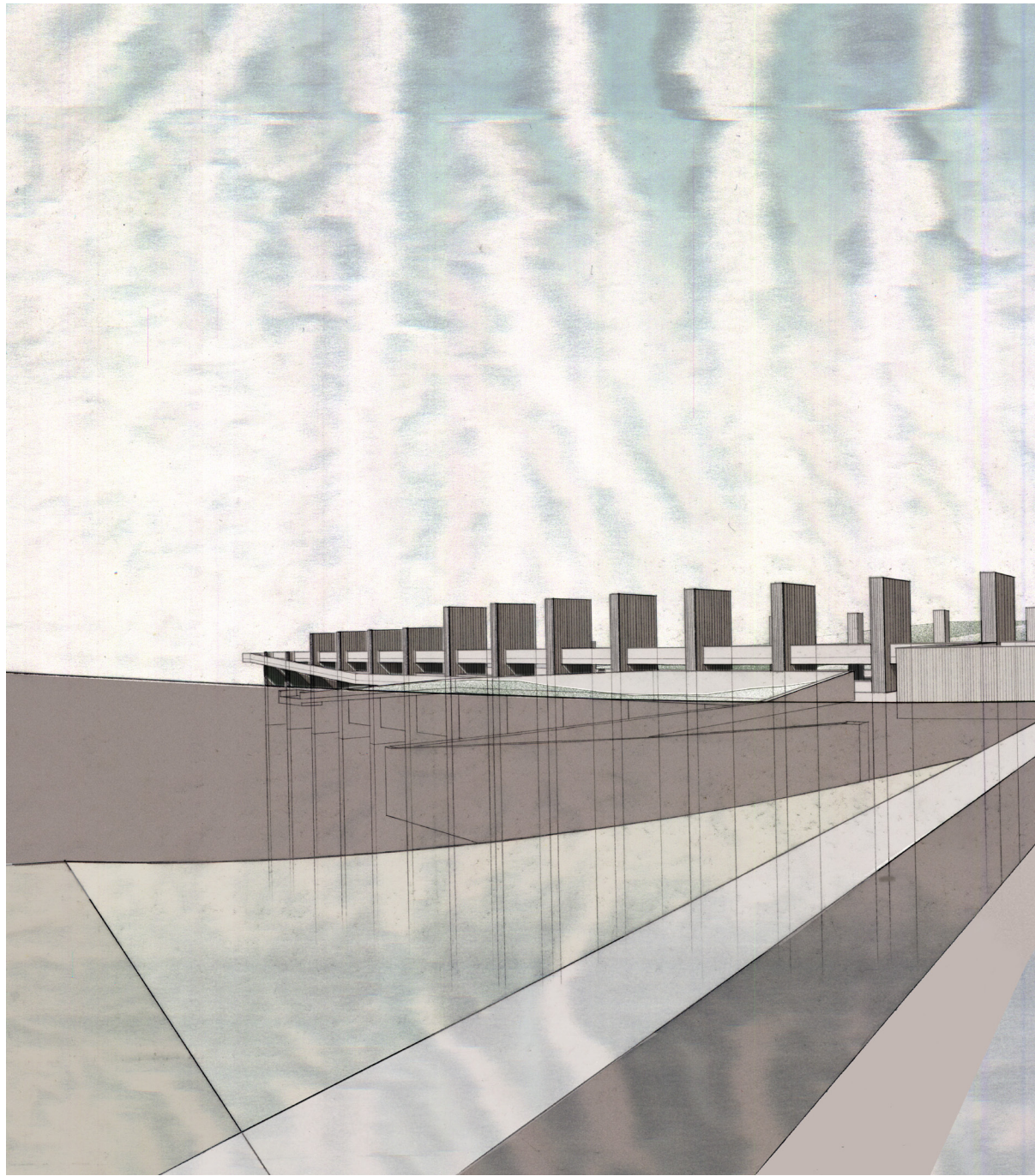
THEORETICAL PREMISE/ UNIFYING IDEA

As digital technology advances, the understanding of real architecture could potentially exist as a mere abstraction of the architecture itself. The things we as designers create influence experiences within the world and influence the construction or re-construction of an individual's fundamental understanding of his or her reality.

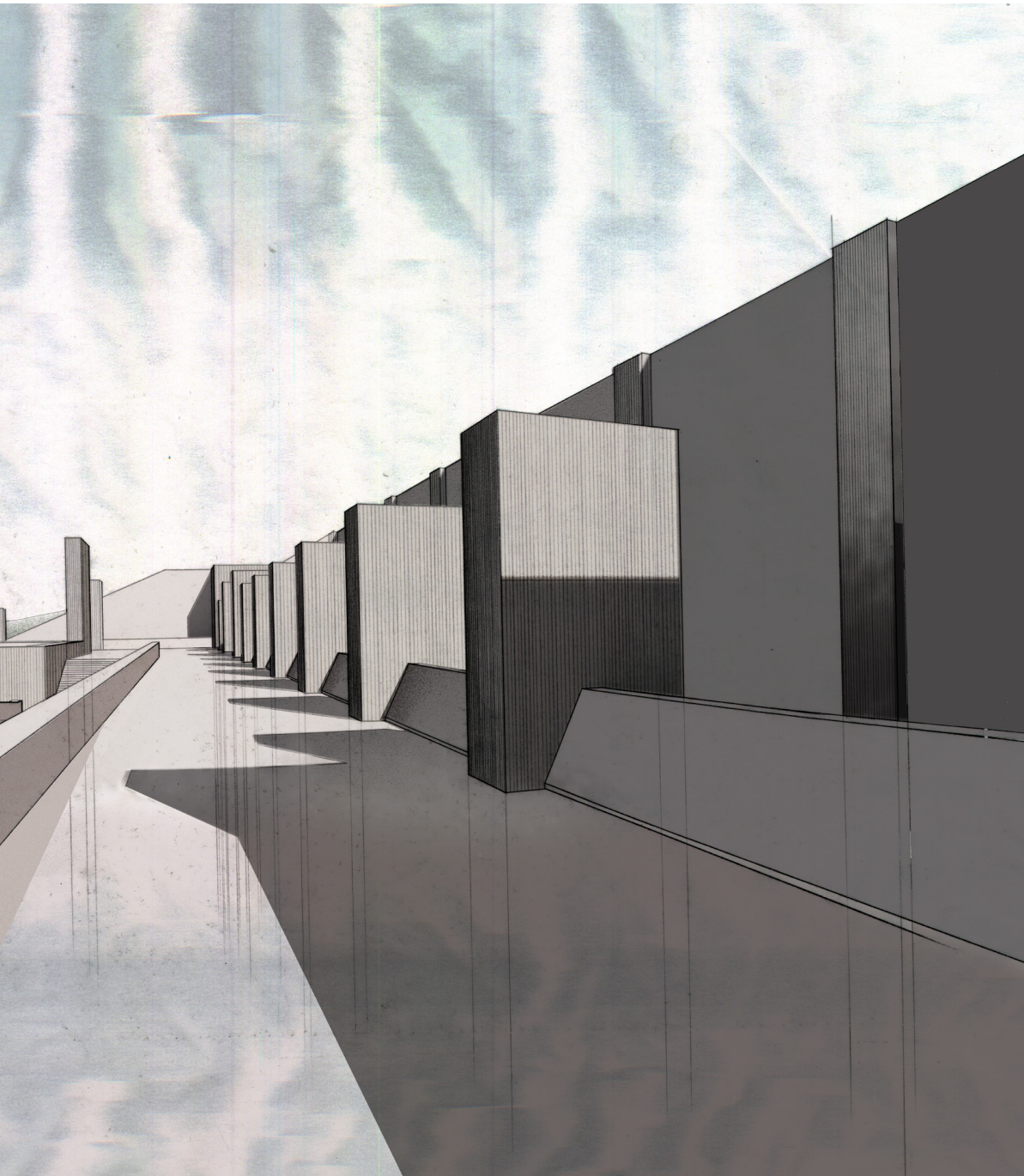
PROJECT JUSTIFICATION

Of the thousands of individuals returning home from military service, many are in need of either, or in some cases both physical and psychological rehabilitation. An architecture placed in a natural environment, located within a larger industrialized context could act as the framework for rehabilitation and the medium for re-assimilation back into society.





P R O J E C T



P R O P O S A L

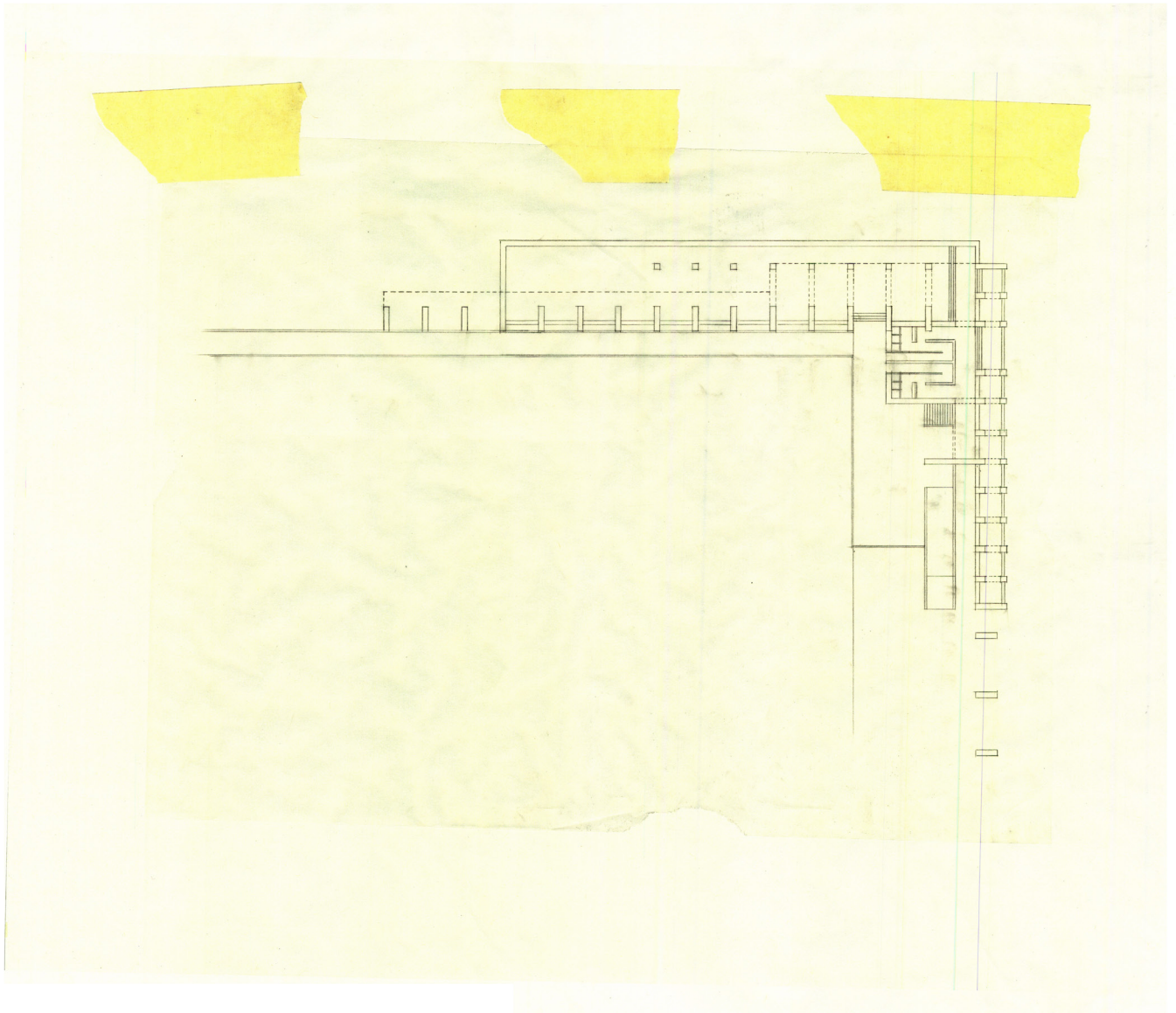
NARRATIVE

The vision of the architect is what shapes the world we live in. Architects find ways to turn conceptual ideas into manifested realities. They are the creative practitioner of poetry, art, philosophy, mathematics, construction, building sciences, public relations and client relationships. It is the job of the architect to encompass everything about living in this world, so that he or she may have the basis for implementing his or her vision into it. That is to say, until recently when the architect has become merely a graphic designer of hyper-realistic, abstract representations of his or her vision. Today, the role of the architect is no longer embedded in the act of physical creation through personal experience but instead in the representation of physical creation through digital exploitation. It is difficult to pinpoint the exact time of this shift, however factors such as the industrial revolution, the introduction and advancement of the computer, popular culture, mainstream media – all things, culture.

Students today are pursuing what has become a meaningless practice of architecture. Physical ideas are developed within the confines of a computer screen and representations of that idea are synthesized using digital rendering software.

The compromise designers face in this “synthetic reality” is a lack in understanding the built relationships between designer and tangible materials through an act of physical creation – a reaction to tangible objects within the physical world in which we live.

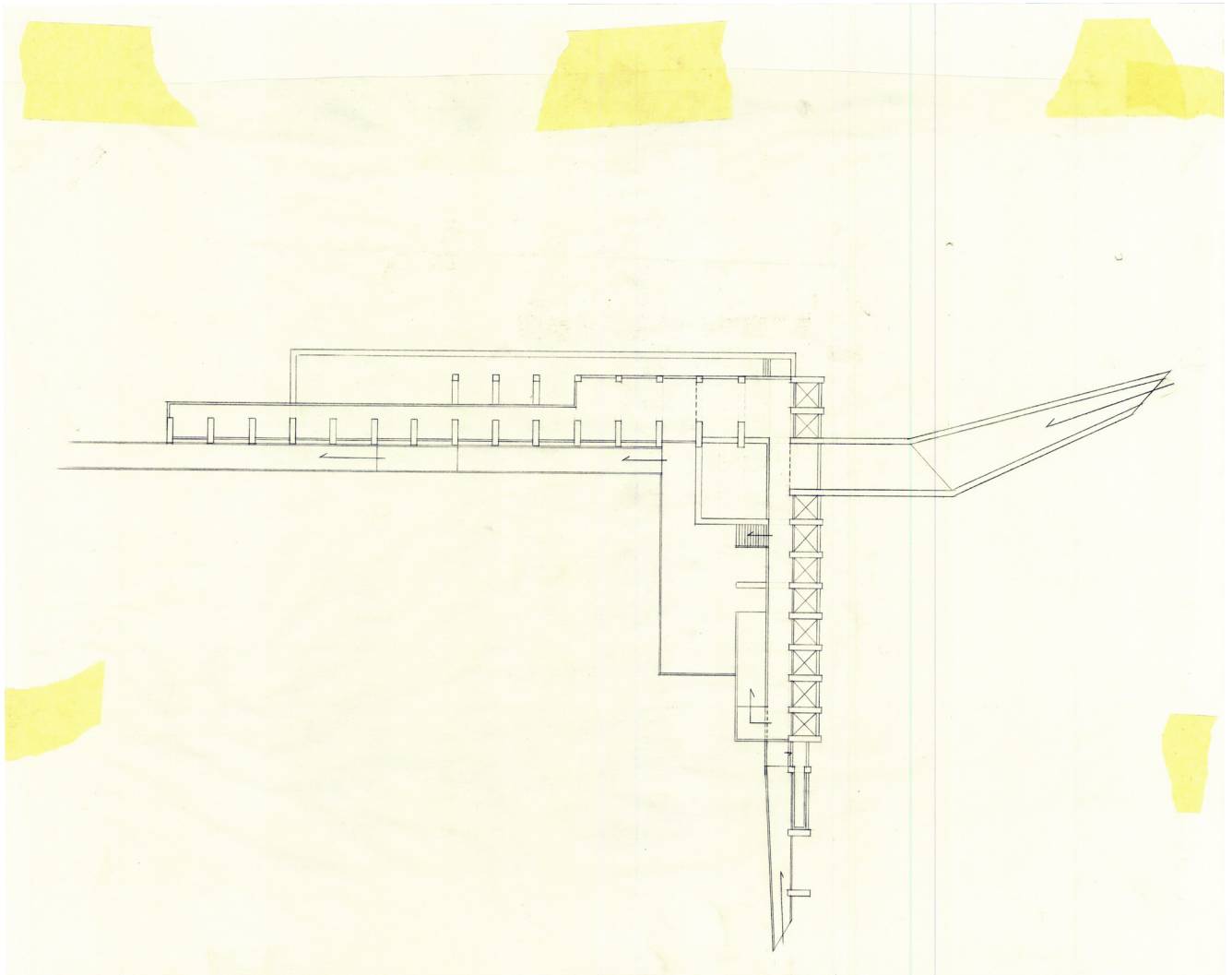
The practice architecture must be “rehabilitated” back to a practice that explores the development of ideas through a physical involvement or presence of tangible materials. Substitution of the “real” for “the hyper-real” within architecture is leading toward a practice of building “misunderstanding” in that architecture is no longer the responsibility of the designer, it is that of the digital environment in which the designer is confined.



USER-CLIENT DESCRIPTION

The primary users of the facility will be individuals in need of either psychiatric or physical rehabilitation after returning home from military service. The facility's program will provide for both the individuals in treatment and their respective family members for a period of time to be determined depending on each patient's particular situation.

The client for this project will most likely be a division of the US Military as an off-branch of the newly constructed Walter Reed Memorial Hospital in Bethesda, Maryland. The facility will employ doctors, nurses, engineers and a full staff with a particular scope of responsibilities.



MAJOR PROJECT ELEMENTS

OUTDOOR PARKING - Separated from the facility grounds via an approach pathway

UNDERGROUND ENTRY TUNNEL - Connection between the park and the facility

IN-PATIENT HOUSING - Provides either long or short-term living accommodations for patients and families

INDOOR/OUTDOOR TESTING FACILITY - Testing grounds for patients and their new equipment.

FABRICATION FACILITY - Staffed by engineers, it is the space where prosthetics are manufactured for patients.

TESTING FACILITY - The environment for both indoor preliminary testing and outdoor calibrations are administered to those seeking rehabilitation.

FITTING/ASSESSMENT ROOM(S) - Where patient's are scanned and analyzed for determining further rehabilitation development.

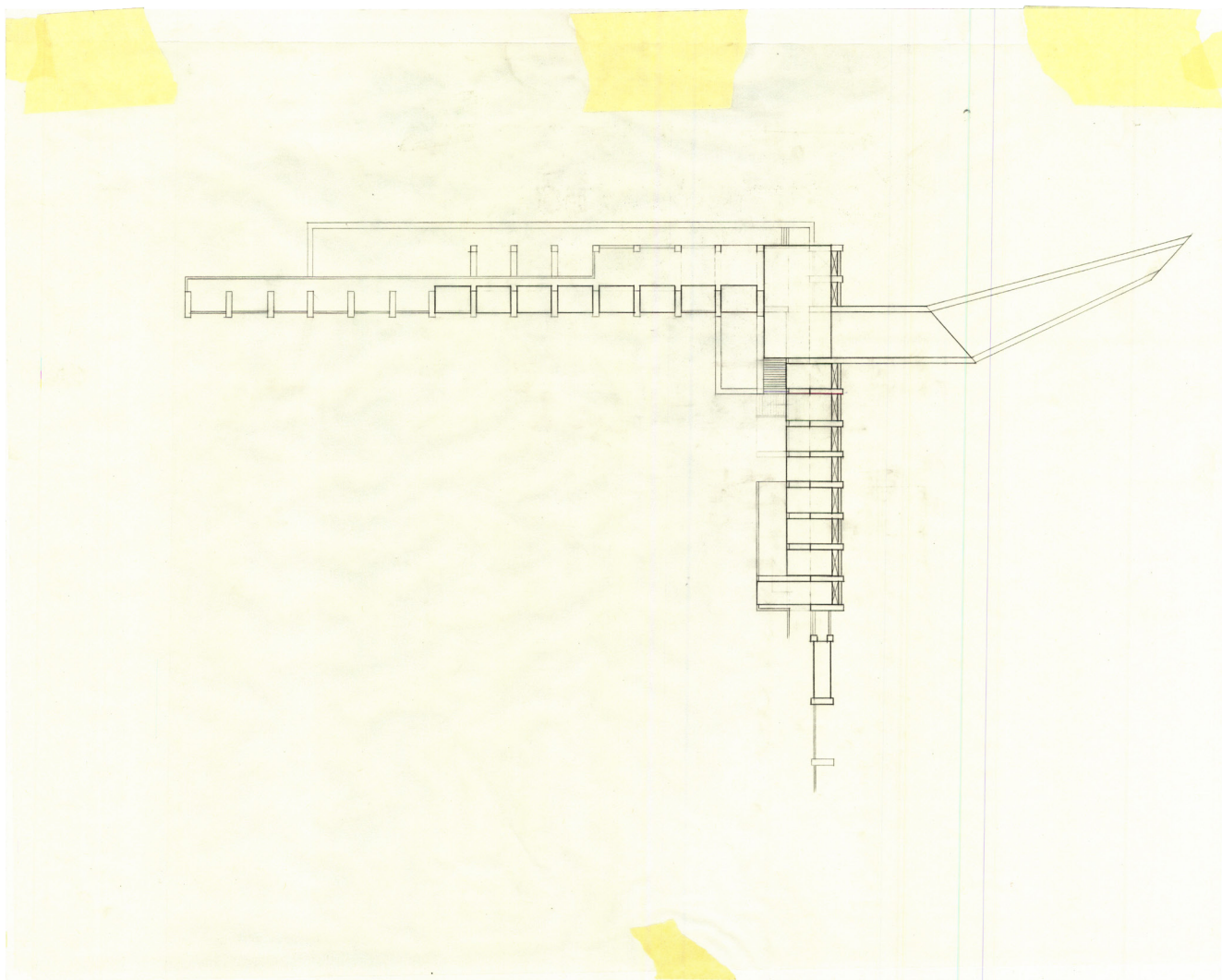
GALLERY/DEMONSTRATION - Allocation for displaying and demonstrating equipment to incoming patients

FACULTY OFFICES - A mix between individualized private offices and spaces for group work and collaboration.

OBSERVATORY - An environment used primarily for those seeking psychological rehabilitation, however it may be open for all patients.

RECOVERY ROOM(S) - A transitional moment for patients to reflect after rehab before entering the facility or their housing unit.

Vertical Circulation - A means for transporting patients and equipment. However it could be multi-functional.



SITE INFORMATION
WASHINGTON D.C.
ROCK CREEK NATIONAL PARK



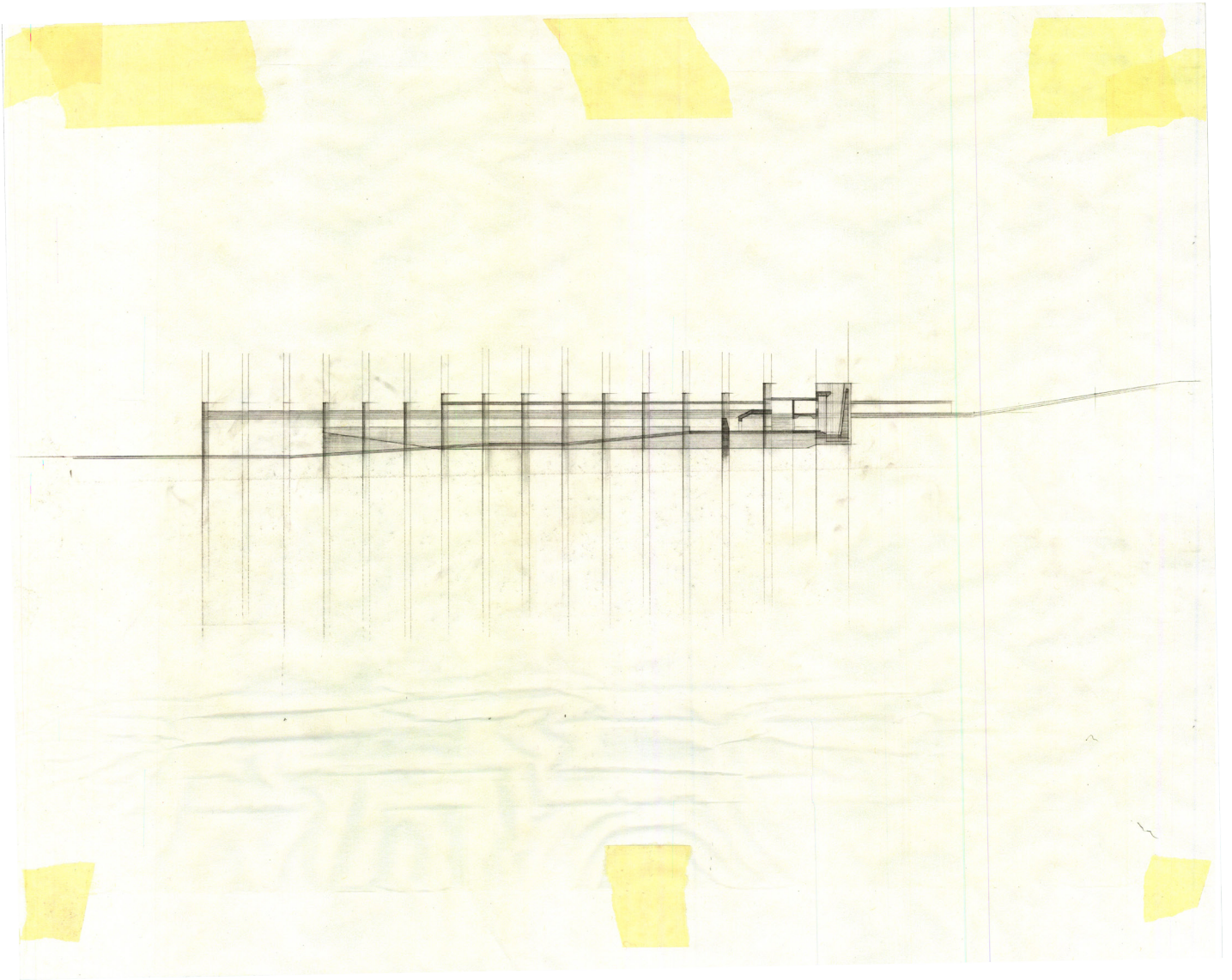


PROJECT EMPHASIS

The project will both emphasize the importance of a physical involvement with materials and space, and also challenge conventional construction practices. Architectural design will be explored and developed through the creation and interpretation of an artifact(s).

The relationship between human beings and the physical environment will be questioned as the project seeks to rehabilitate individuals through a constant involvement and presence of the site itself. Material studies will provide conceptual insight of ideas while elucidating certain aspects of experience.

The nature of the project will draw a parallel to the conceived reality that exists in certain architectural processes and the rehabilitation back to pursuing design that is always inherently in real, physical space.



PLAN FOR PROCEEDING

RESEARCH DIRECTION

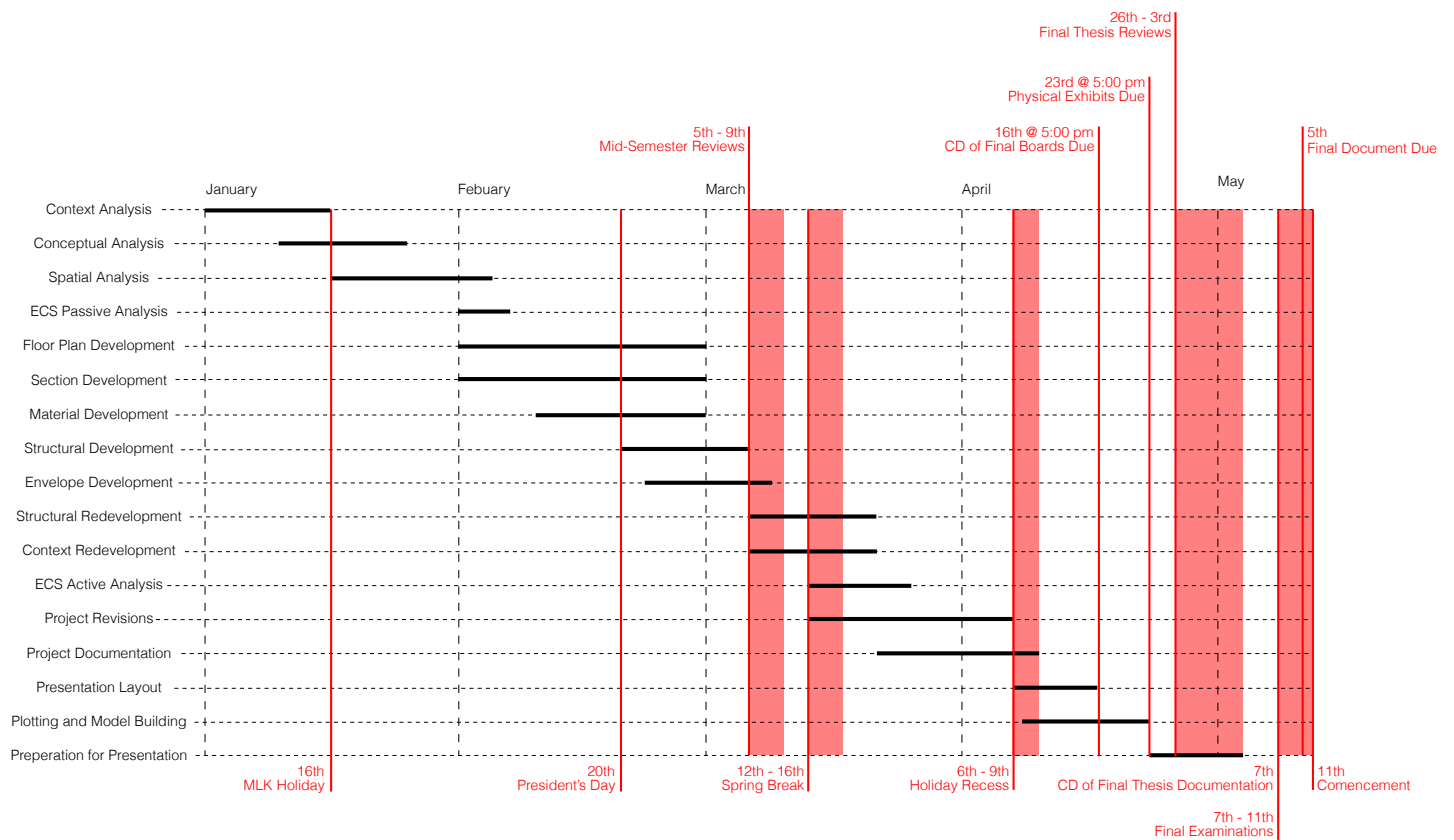
Thorough and extensive research will be conducted and evaluated critically throughout the theoretical premise/unifying idea, project typology, historical context, site analysis and programmatic requirements.

DESIGN METHODOLOGY

The research for this thesis will be based on a Mixed Method Quantitative/Qualitative Approach. Both qualitative and qualitative information will be simultaneously gathered, evaluated and interpreted using a Concurrent Transformative Strategy. The priority of the research will be assigned by the requirements of the theoretical premise/unifying idea. Most importantly, an involvement with materials and structure will provide the framework for moving design decisions forward in a particular and poetic manner.

DOCUMENTATION

Process throughout the project will be recorded through sketches, material exploration, structural studies, and various models. Photographs and scanned images will be stored digitally to preserve ideas during the course of the project and will then be compiled in a document for distribution or for future reference. Process will be evaluated and presented at specific due dates through architectural drawings and models.



PREVIOUS STUDIO EXPERIENCE

SECOND YEAR

Fall 2008

Instructor : Stephen Wischer
Tea House, Boathouse

Spring 2009

Instructor : Meghan Duda
Dance Studio, Dwelling

THIRD YEAR

Fall 2009

Instructor: Paul Gleye
Library, Student Center

Spring 2010

Instructor: David Crutchfield/Mike
Christensen
Performance Center, Modeling-
Iterations

FOURTH YEAR

Fall 2010

Instructor: Frank Kratky
High Rise

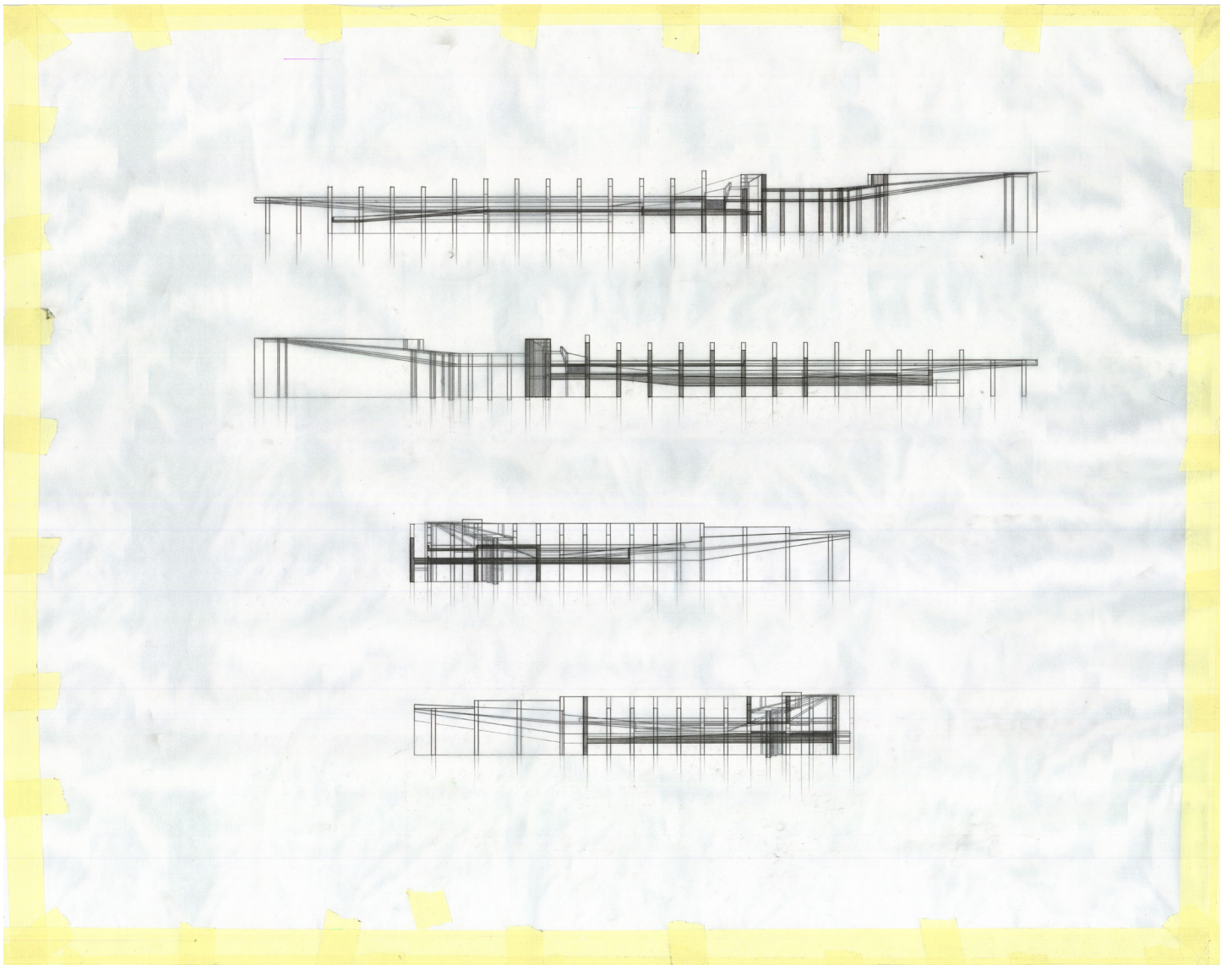
Spring 2011

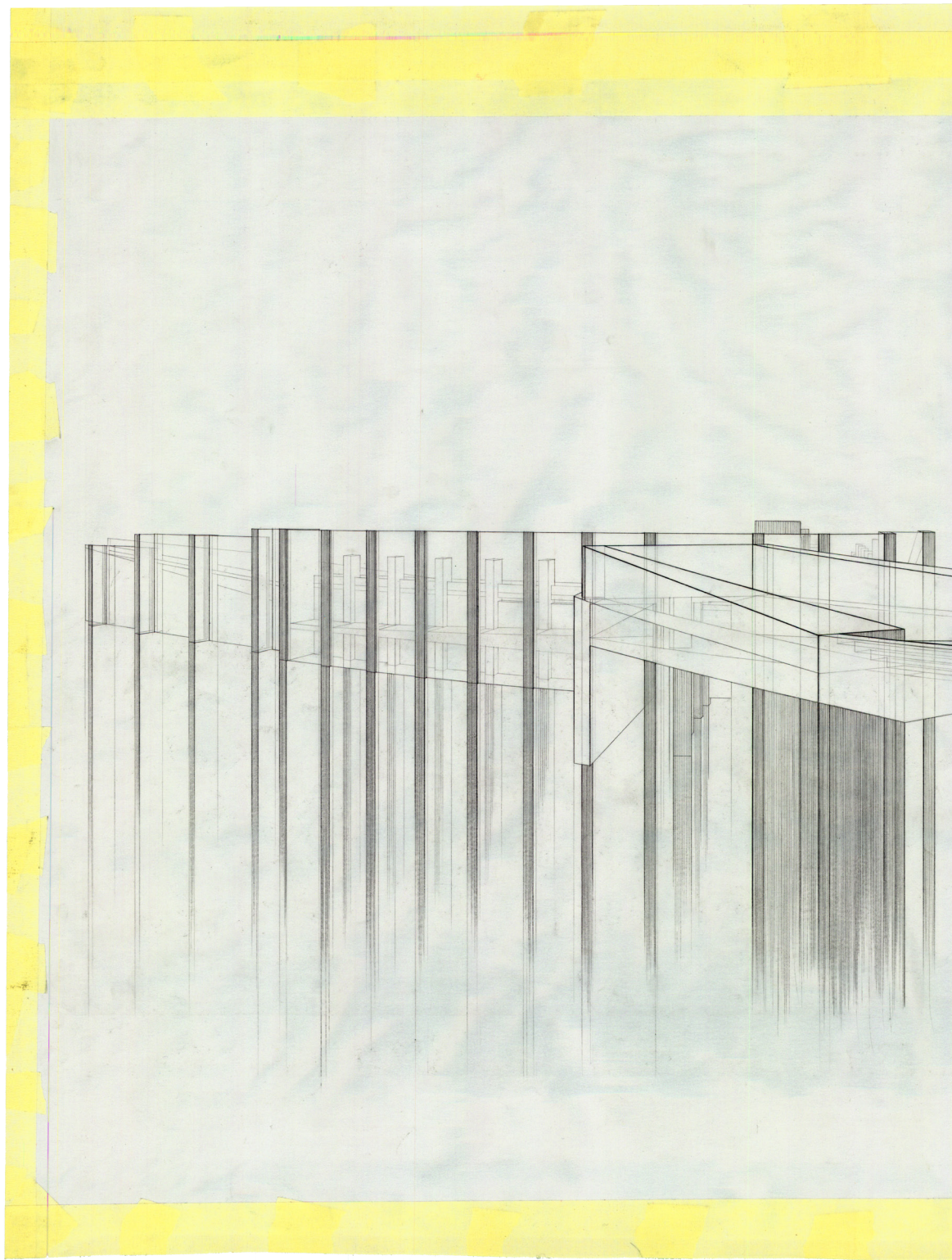
Instructor: Malini Srivastava
Design Build

FIFTH YEAR

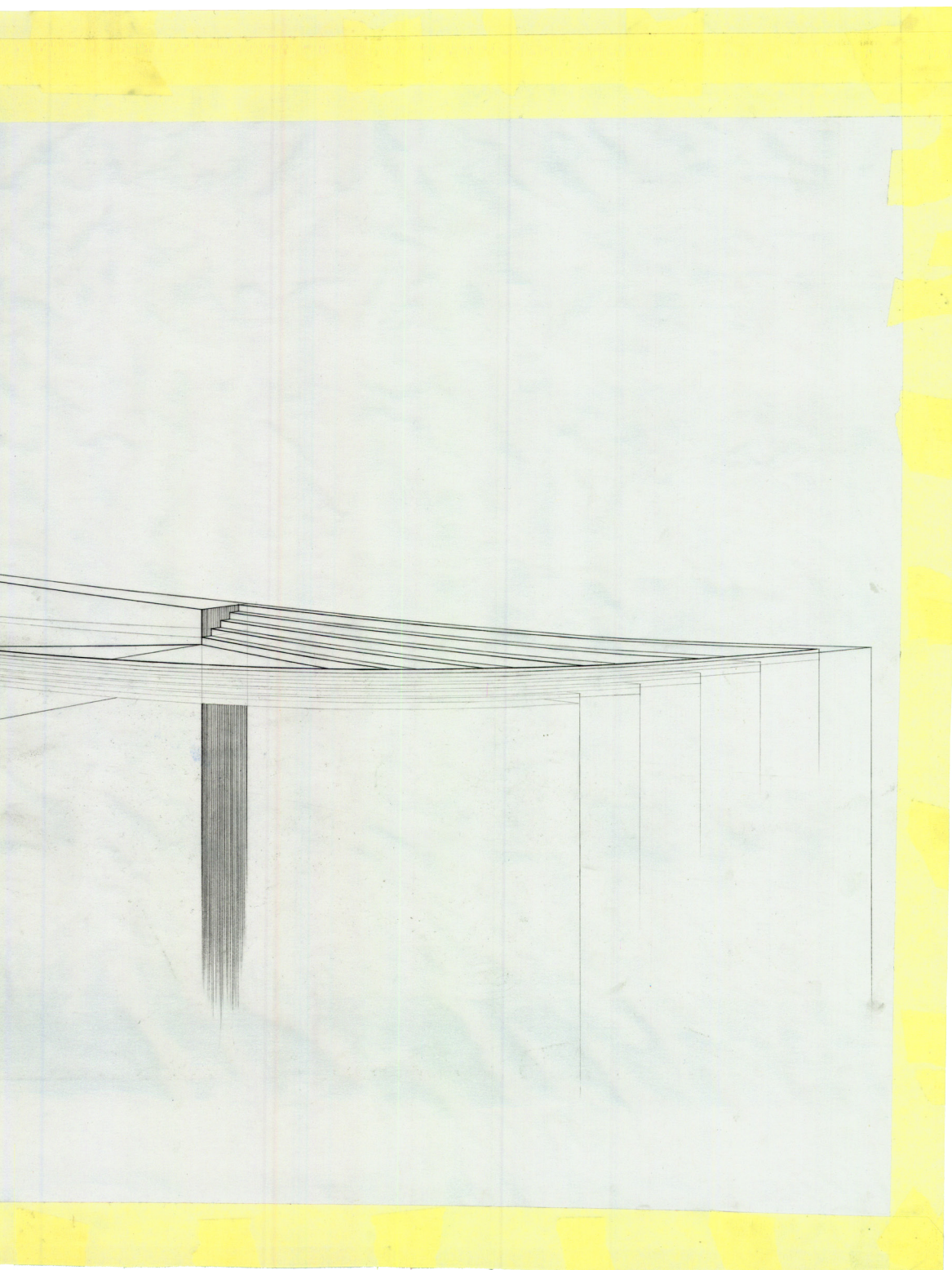
Summer 2011

Instructor: Malini Srivastava
Summer Build Studio





P R O G R A M



DOCUMENT

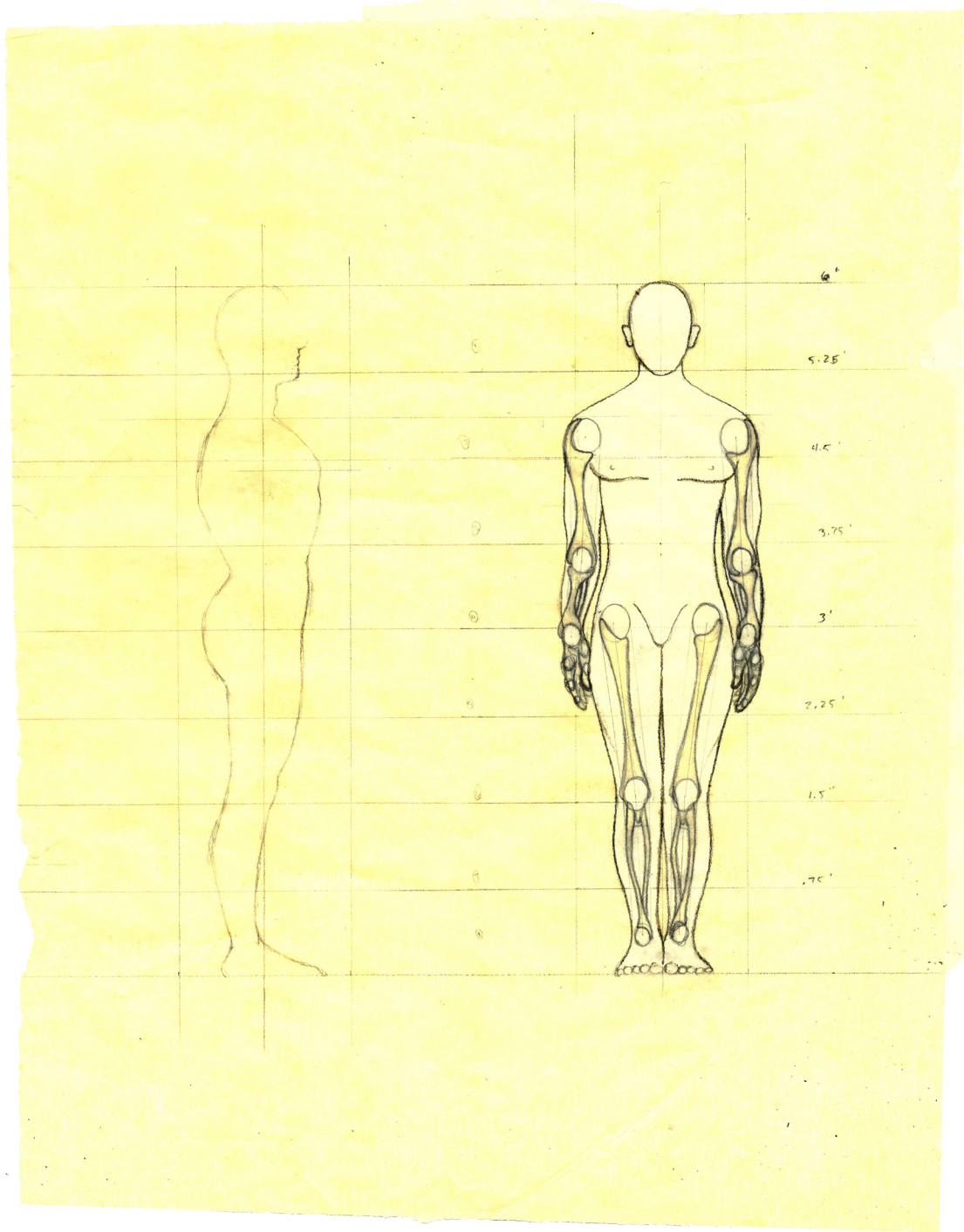
T H E O R
R E S E

ETHICAL ARCH

The research for this thesis is primarily based on theoretical discussions regarding human perception and the history of certain influences that have shaped perception itself. The majority of the readings are from philosophers well-practiced in both architecture and the study of phenomenology and the body's relation to the world. The significance of understanding one's existence within the world is vital to understanding architectural creation for the body is the tool in which one relates to the rest of the world. It is without saying that the introduction to today's idea of "technology" has had a significant impact on a society's understanding and appropriation for certain tools within the practice of architecture. This thesis will hope to show how culture and society's eager acceptance of certain technological advancements has led to individual disregard for the inherent tool set we as human beings are born with. And how certain misappropriations of modern tools and advancing technologies are beginning to blur the line between what is real, and what is not.

To have an understanding of how we as a culture perceive the world we live in today, one must call upon history for both the ideas and the events that began to inform what is now our current framework for interpreting our experiences within the world.





PERCEPTION AND THE BODY

"We are always living in the world of perception."

- Maurice Merleau-Ponty

The basis for Merleau-Ponty's philosophical project is Descartes's relationship to the body and to its world. The suggestion on the Cartesian metaphysical split of *res cogitans* and *res extensa*, and its distinction between subject and object, remove the impact of the mind on the lived experience of the body. Merleau-Ponty begins with Descartes's provocative depiction of the soul as being "not merely in the body as a pilot in his ship, but *wholly intermingled*." His constructive negotiation of the relation between the subject being perceived to the body center upon the primacy of perception. Primacy, the state of being foremost, affirms that perception is truly at the foundation of our lived experience. Perception, on the other hand is opposed to empirical sensation as simply a reflexive response to a physical or chemical action of a stimulus as an objective event in the natural world, without the complications of a conscious subject who perceives. That is to say, a neuron's ability to transmit signals means nothing without a mind to make sense of it. He establishes his position that perception is an original modality of consciousness:

"We cannot apply the classical distinction of form and matter to perception, nor can we conceive the perceiving subject as a consciousness which "interprets", "deciphers", or "orders" a sensible matter according to an ideal law which it possesses. Matter is "pregnant" with its form, which is to say that in the final analysis every perception takes place within a certain horizon and ultimately in the "world". We experience a perception and its horizon "in action" rather than "posing" them or explicitly "knowing" them. Finally, the quasi-organic relation of the perceiving subject and the world involves, in principle, the contradiction of immanence and transcendence." (Primacy, 2).

Merleau-Ponty's work titled, "The Visible and the Invisible" explores his ideas regarding the intertwining of experiential knowledge brought forth into one's self through vision, which he defines as, "The Chiasm".

"The visible about us seems to rest in itself. It is though our vision were formed in the heart of the visible, or as though there were between it and us an intimacy as close as between the sea and the strand." (Ponty 130-1)

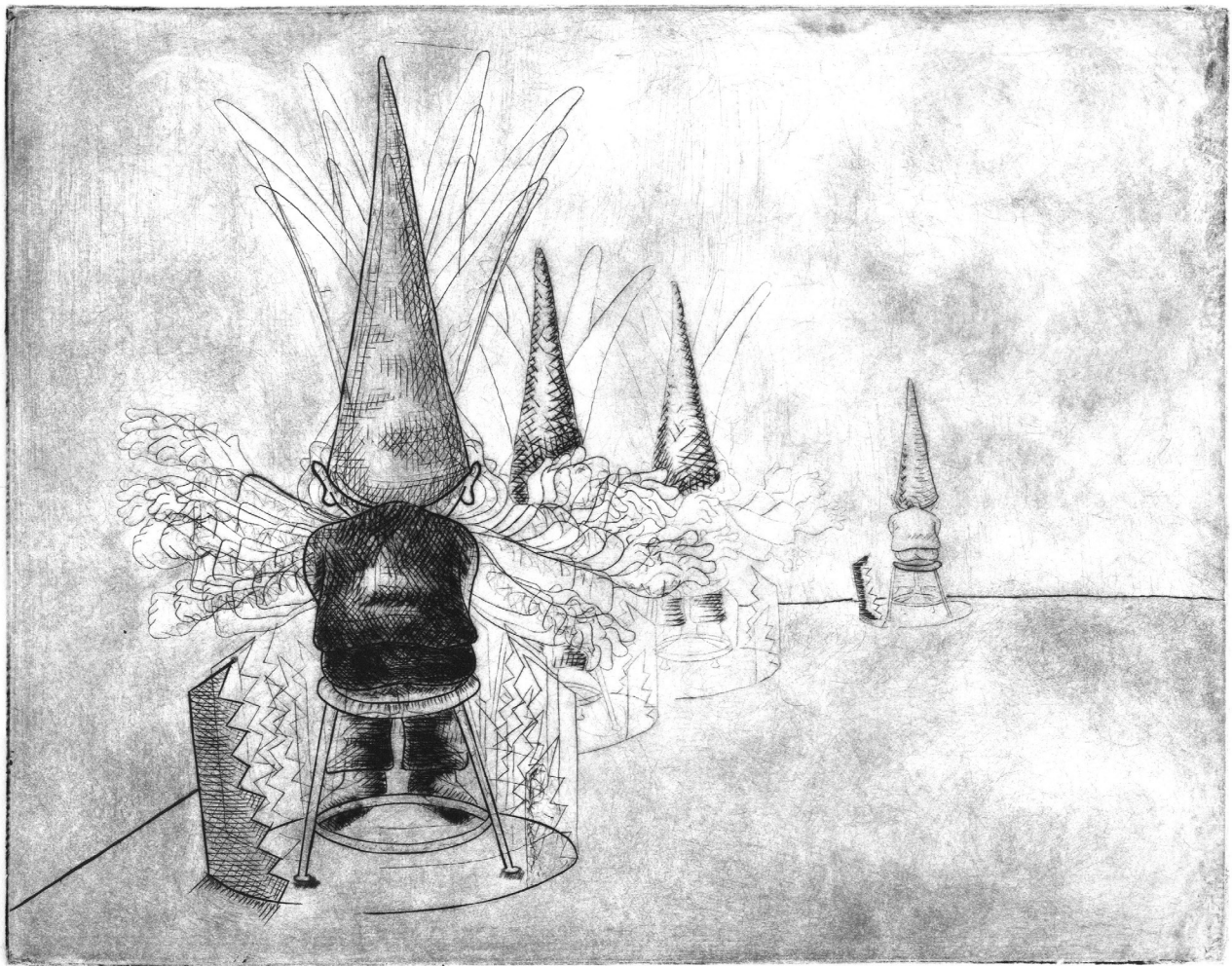
Although we have many senses our body brings these together into one understanding. Two hands perceive two unique experiences, yet they both translate into one sole understanding. It is this translation of unique sensations across our body to couple with the other unique sensations which allows us to not only perceive, but to reveal the nature and depth of our own understanding, imagination, and experience of which all are woven together.

"It is always from the unique treasure of our own vision that we draw, and experience can therefore teach us nothing that would not be outlined in our own vision. But what is proper to the visible is, we said, to be the surface of an inexhaustible depth: this is what makes it able to be open to visions other than our own." (Ponty 143)

It is the unquantifiable measure of an individual's intellectual capacity and sensory perception that deconstructs a factual understanding. It is through the seer that the seen escapes its factual definitions and becomes understandable to humans. It is through both touching and seeing that we are able to understand our own presence in the world.

"We are not here proposing any empirical genesis of thought: we are asking precisely what is that central vision that joins the scattered visions, that unique touch that governs the whole tactile life of my body as a unit, that I think that must be able to accompany all our experiences. We are proceeding towards the center, we are seeking to comprehend how there is a center, what the unity consists of, we are not saying that it is a sum or result; and if we make the thought appear upon an infrastructure of vision, this is only in virtue of the uncontested evidence that one must see or feel in some way in order to think, that every thought known to us occurs to a flesh." (Ponty 145-6)

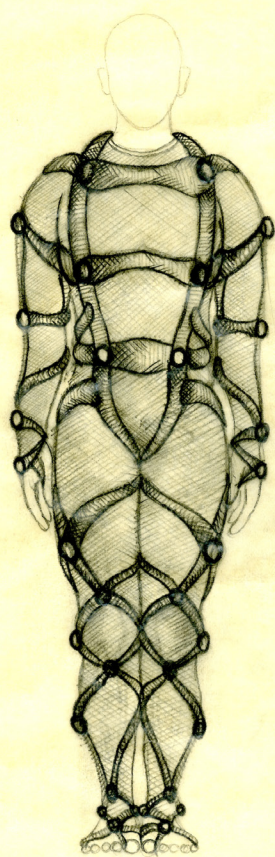
All that we know is through our flesh and this embodiment of experiences is what shapes our thinking. In turn our thinking shapes how we experience. the same way in what we know through touch is also touching us, we see that all understanding is bound up in the circles which tie the seeing to the seen or the touching to the touched. We begin to see that there is an inherent bond between the flesh and the idea, *"between the visible and the interior armature which manifests and which it conceals."* (Ponty 149)



"TIME-OUT"

WP

MAY 2010



THE BODY IMAGE

"The outline of my body is a frontier which ordinary spatial relations do not cross...My whole body for me is not an assemblage of organs juxtaposed in space. I am an undivided possession of it and I know where each of my limbs is through a "body image" in which all are included." (Ponty)

The term, "body image" was at first understood to mean a "compendium" of our bodily experience, capable of giving a commentary and meaning to the internal impressions and the impression of possessing a body at any moment. It was supposed to register the positional changes of the parts of the body for each movement of one of them, the position of each local stimulus in the body as a whole, an account of the movements performed at every instant during a complex gesture, in short a "*continual translation into visual language of the kinaesthetic and articular impressions of the moment.*" (Ponty)

There has since been a movement toward another definition of body image, it is no longer seen as the straightforward result of associations established during experience, but a total awareness of my posture in the intersensory world, a *form*.

Bodily space can be distinguished from external space and envelop its parts instead of spreading them out, because it is the "darkness needed in the theatre to show up the performance, it is the zone of not being in front of which precise beings, figures and points can come to light." (Ponty) The body image is in fact a way of stating that a body is in the world.

As far as spatiality is concerned, one's own body is always tactilely understood, in the figure-background structure, and every figure stands out against the double horizon of external and bodily space. One must therefore reject as an abstraction any analysis of bodily space which takes account only of figures and points, since these can neither be conceived nor be without horizons. In order to experience a display of dexterity as a figure *against* the massive background of the body, the hand and the rest of the body must be linked by this relationship of objective spatiality, so that the figure-background structure becomes one of the contingent contents of the universal form of space.

“When I say that an object is on a table, I always mentally put myself either in the table or in the object, and I apply to them a category which theoretically fits the relationship of my body to external objects.” (Ponty)

“Far from my body’s being for me no more than a fragment of space, there would be no space at all for me if I had no body. If bodily space and external space form a practical system, the first being the background against which the object as the goal of our action may stand out or the void in front of which it may come to light, it is clearly in action that the spatiality of our body is brought into being, and an analysis of one’s own movement should enable us to arrive at a better understanding of it.” (Ponty)

We must ask why there are two views of me and of my body: my body for me and my body for others, and how these two systems can exist together. It is indeed not enough to say that the objective body belongs to the realm of ‘for others’, and my phenomenal body to that of ‘for me’, and we cannot refuse to pose the problem of their relations, since the ‘for me’ and the ‘for others’ co-exist in one and the same world.

From the perception of one’s body, we move toward establishing the distinction between abstract and concrete movement: the background to concrete movement is the

world as given, whereas the background to abstract movement is built up; it superimposes upon physical space a virtual or human space. The normal function which makes abstract movement possible is one of ‘projection’ whereby the subject of movement keeps in front of him an area of free space in which what does not naturally exist may take on a semblance of existence.

‘The sound always leads us towards its content, its significance for us; in visual presentation, on the other hand, we can much more easily “disregard” the content and we are drawn much more definitely towards the part of space where the object is to be found.’ (Ponty)

Visual representations, tactile data and motility are three phenomena which stand out sharply within the unity of behavior. When, by reason of the fact that they show correlated variations, we try to explain one in terms of the other, we forget, for example, that the act of visual representation already presupposes the same power of projection as is seen in abstract movement and in the act of pointing out

Plato still allowed the empiricist the power of pointing a finger at things, but the truth is that even this silent gesture is impossible if what is pointed out is not already subsumed under some category and promoted to the status of a concept.

Abstract movement is diffused with a power

of objectification, a “symbolical function”, a “representative function”, a power of “projection” which is, moreover, already at work in forming “things”. As soon as there is consciousness, and in order that there may be consciousness, there must be something to be conscious of, an intentional object.

“If a being is consciousness, he must be nothing but a network of intentions. If he ceases to be definable in terms of the act of sense-giving, he relapses into the condition of a thing, the thing being precisely what does not know, what slumbers in absolute ignorance of itself and the world, what consequently is not a true self.” (Ponty)

The distinction between concrete and abstract movement comes down to that between the physiological and the psychic, existence in itself and existence for itself. It can survive only if there are several ways for the body to be a body, several ways for consciousness to be consciousness. As long as the body is defined in terms of existence in-itself, it functions uniformly like a mechanism, and as long as the mind is defined in terms of pure existence for-itself, it knows only objects arrayed before it. The distinction between the two is therefore not to be confused with that between body and consciousness; it does not belong to the same reflective dimension, but finds its place only in the behavioral dimension.

The senses and one’s own body puts forth

beyond itself meanings capable of providing a framework for a whole series of thoughts and experiences. Consciousness is in the first place not a matter of ‘I think that’ but of ‘I can’. It projects itself into a physical world and has a body and because it has a body, movement may only be learned when the body has understood it. And in order that we may be able to move our body towards an object, the object must first exist for it, our body must not belong to the realm of the ‘in-itself’. ‘Each voluntary movement takes place in a setting, against a background which is determined by the movement itself. We perform our movements in a space which is not “empty” or unrelated, but in fact bears a highly determinate relation to them.

We must therefore avoid saying that our body is in space, or in time. It inhabits space and time. And just as it is necessarily ‘here’, the body necessarily exists ‘now’; it can never become ‘past’.

At each successive instant of a movement, the preceding instant is not lost sight of. It is, as it were, dovetailed into the present, and present perception generally speaking consists in drawing together, on the basis of one’s present position, the succession of previous positions, which envelop each other.

“In so far as I have a body through which I act in the world, space and time are not, for me, a collection of adjacent points nor are they a limitless number of

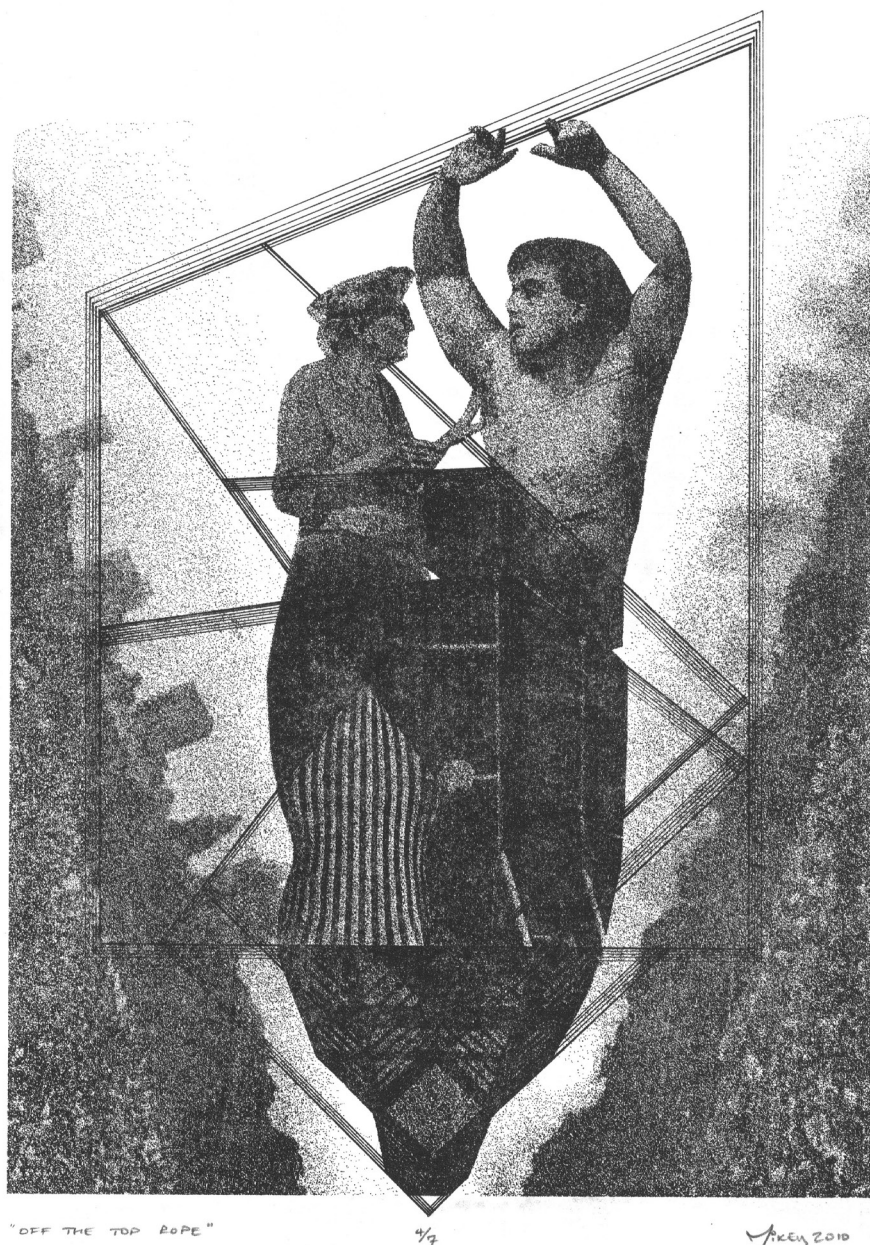
relations synthesized by my consciousness, and into which it draws my body. I am not in space and time, nor do I conceive space and time; I belong to them, my body combines with them and includes them.” (Ponty)

Our bodily experience of movement is not a particular case of knowledge; it provides us with a way of access to the world and the object without having to make use of ‘symbolic’ or ‘objectifying function’. Motility is the primary sphere in which initially the meaning of all significances is engendered in the domain of represented space. Points in space do not stand out as objective positions in relation to the objective position occupied by our body; they mark, in our vicinity, the varying range of our aims and our gestures.

The origin of habit can be defined as an act of understanding which organizes the elements only to withdraw subsequently? It is the body which “catches” and “comprehends” movement. We say that the body has understood and habit has been cultivated when it has absorbed a new meaning, and assimilated a fresh core of significance. The acquisition of a habit is indeed the grasping of a significance, but it is the motor grasping of a motor significance. For example, If I am in the habit of driving a car, I enter a narrow opening and see that I can ‘get through’ without comparing the width of the opening with that of the wings, just as I go through a doorway without checking

the width of the doorway against that of my body. The car has ceased to be an object with a size and volume which is established by comparison with other objects. It has then become potentialities of volume, the demand for a certain amount of free space.

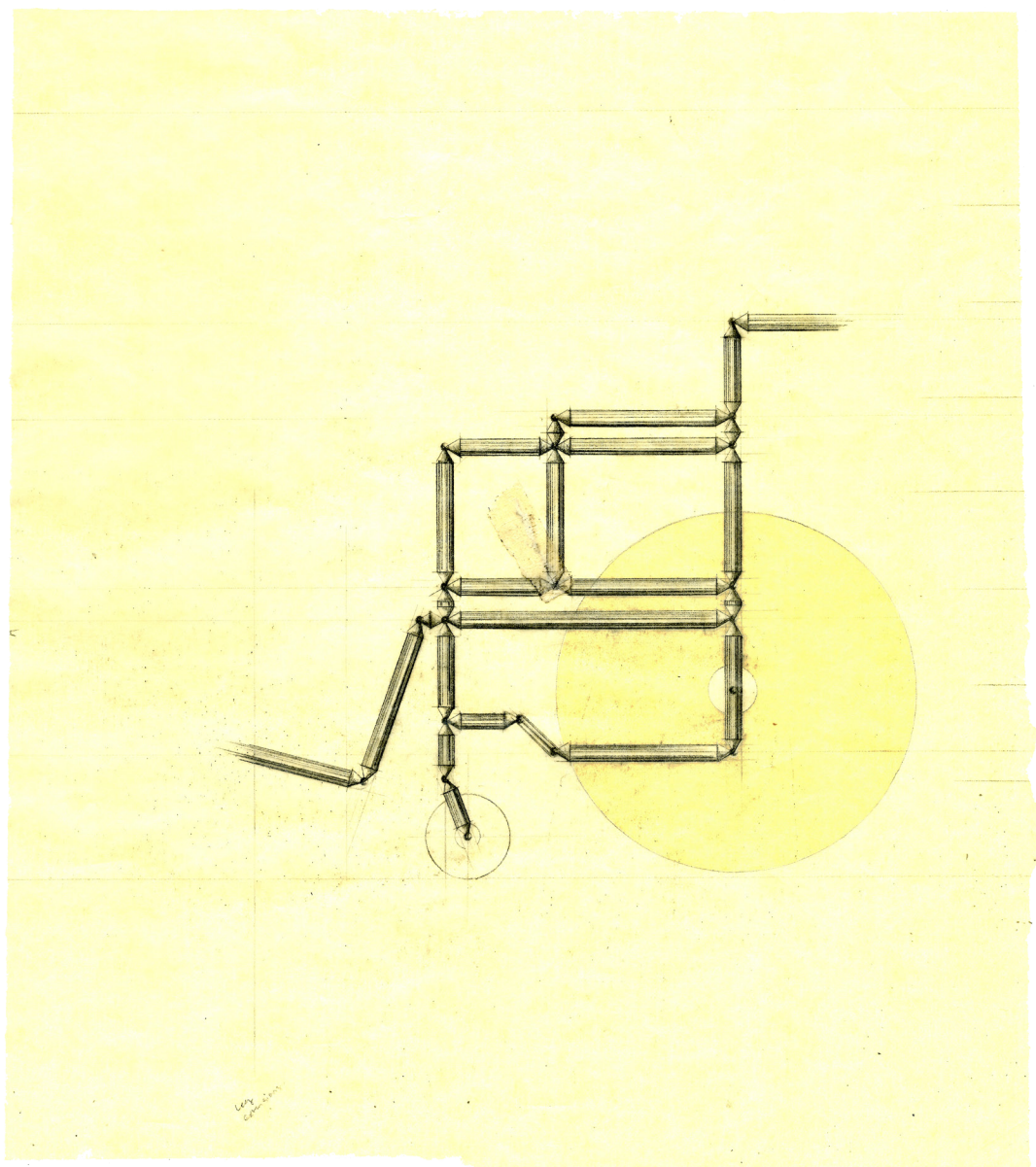
The phenomenon of habit is just what prompts us to revise our notion of “understanding” and our notion of the body. To understand is to experience the harmony between what we aim at and what is given, between the intention and the performance—and the body both our medium for having a world, and our anchorage within a world.



"OFF THE TOP ROPE"

4/7

Mikey 2010



TOOLS, TECHNOLOGY, AND ART

"The Question Concerning Technology" is an abstract written by a German philosopher, Martin Heidegger whose intention was to investigate technology in order to prepare us for a "free relationship" with it. One of the essential subjects of Heidegger's investigation is to understand how we currently relate to technology, how we see it, how we utilize it, and what we imagine it to be. The problem is not so much the existence of technology or the form it takes, but rather it is our orientation to technology. By first accepting this truth, we can then accept the fact that we cannot respond to the problems caused by the very essence of technology by simply making technology better. Nor can we omit certain difficulties inherent in technology by simply "opting-out" of it.

"The essence of technology is by no means anything technological. Thus we shall never experience our relationship to the essence of technology so long as we merely conceive and push forward the technological, put up with it, or evade it. Everywhere we remain unfree and chained to technology, whether we passionately affirm or deny it." (287)

Philosopher Martin Heidegger poses the question, "how do we generally think about technology?" His answer comes as a two part explanation: technology is a means to an end, and technology is a human activity. This provokes the idea that there is an instrumental nature about technology, bringing forth both a certain amount of responsibility for the things we make and in the things themselves, an indebtedness to the maker.

"Bringing-forth brings out of concealment into unconcealment" (293).

Poiesis is an act through which making or creating reveals truth. The revealing that rules modern technology is a "challenging" which puts to nature the unreasonable experience nature on nature's terms. Because enframing does not utterly change humanity's association to the world, potential exists, within enframing, for a different orientation to the world.

"Once we identify our own orientation to the world is the essence of technology, once we open ourselves to this essence, we find an opportunity to establish a free relationship to technology. Humankind can understand that only by re-orienting itself to the way in which nature reveals itself can humanity establish a relationship with the world that is not inevitably self-destructive" (314).



INVASION

5/8

Y. KEY 2010

There is however, within enframing a critique on the inherent manner in which it aims to understand the world by categorizing individual aspects of what the early Greeks considered to be a holistic and undivisible entity. Art, or inevitably creation, is an alternative manner which expresses humanity's sense of connectedness with all being and as Heidegger claims, is the outgrowth of humanity's care of all existence.

Alberto Perez-Gomez states in his writing titled, "Architecture and the Crisis of Modern Science" on this notion of art within society,

"The knowledge that can be found within art has been completely forgotten and is now seen as just something beautiful."

The knowledge acquired from experience is filtered through the most basic and fundamental tool we as human beings possess, the body. According to Perez-Gomez, humans have required filters in order to understand their perception of the world. There has always been "the ideal and the real", the way we imagine our world to be and what we actually know the world to be.

"The way we come into contact with the real is the body. The body is our tool for perception. Perception is the most basic form of knowledge and cannot exist without the body and its engagement to the world." (Perez-Gomez 1985)

Gomez quotes Maurice Merleau-Ponty claiming the body "is the locus of all formulations about the world. It is how we perceive space and time because we are of space and time.

Our body has dimensions and our interaction with our surroundings creates time. This, Gomez claims is the beginnings of understanding our world. However, through advancements in mechanical science, "man began to subject matter to his will." With the introduction of new tool sets, man gained the confidence to believe that mankind can control the world, an unimagined possibility some time ago has finally arrived. However, one could argue that the tools used to do so have taken over man. "Our instruments have become part of ourselves and are changing perception by being the filter in which we all see through" (Perez-Gomez 1985).

The body is our filter for both perceiving and interpreting the world around us. Understanding of truth is revealed through acts of creation and from this, we as human beings are responsible for the things we create. Within art, much of the understanding or gained knowledge from the experience relies on the notion of, distance. The "critical distance" between the viewer and the object is what allows one to derive meaning by calling in bringing forth their own personal experiences.



The early Greeks, specifically Aristotle, believed humans to be mimetic beings who felt the urge to create art that both reflected and represented reality. It was however, crucial that the work of art establish and maintain a certain distance between itself and the realities of life. In regards to Tragedy, we as individuals are able to draw from it both knowledge and consolation because even though we understand an act to be an act, we are still able to imagine ourselves as characters within it; it is both recognizable and distant.

Aristotle gave reason to this occurrence by explaining *mimesis* as, “simulated representation” or a response to the acting on the stage which is conveying to us what the character feels, so that we may empathize with them in this way through imitation or dramatic role-play.

“At first glance, mimesis seems to be a stylizing of reality in which the ordinary features of our world are brought into focus by a certain exaggeration, the relationship of the imitation to the object it imitates being something like the relationship of dancing to walking. Imitation always involves selecting something from the continuum of experience, thus giving boundaries to what really has no beginning or end. Mimesis involves a framing of reality that announces that what is contained within the frame is not simply real. Thus the more “real” the imitation the more fraudulent it becomes.” - Aristotle

SUMMARY

We are always living in the world of perception, however we often avoid our perceptions with “critical thought”, almost to the point of forgetting the involvement that perception plays with regard to our idea of truth. Critical thinking, necessary or not, is demanding that our experiences have validity and prevents us from the truly knowing the world we perceive. The world of the perceived exists beneath the world of critical thought, beneath the level of verified true and false.

The findings of my research were organized in a particular order to allow one to gain an understanding of the body’s significance in relation to an individual’s reality. Maurice Merleau-Ponty’s theoretical philosophy is foundation in which this idea is established.

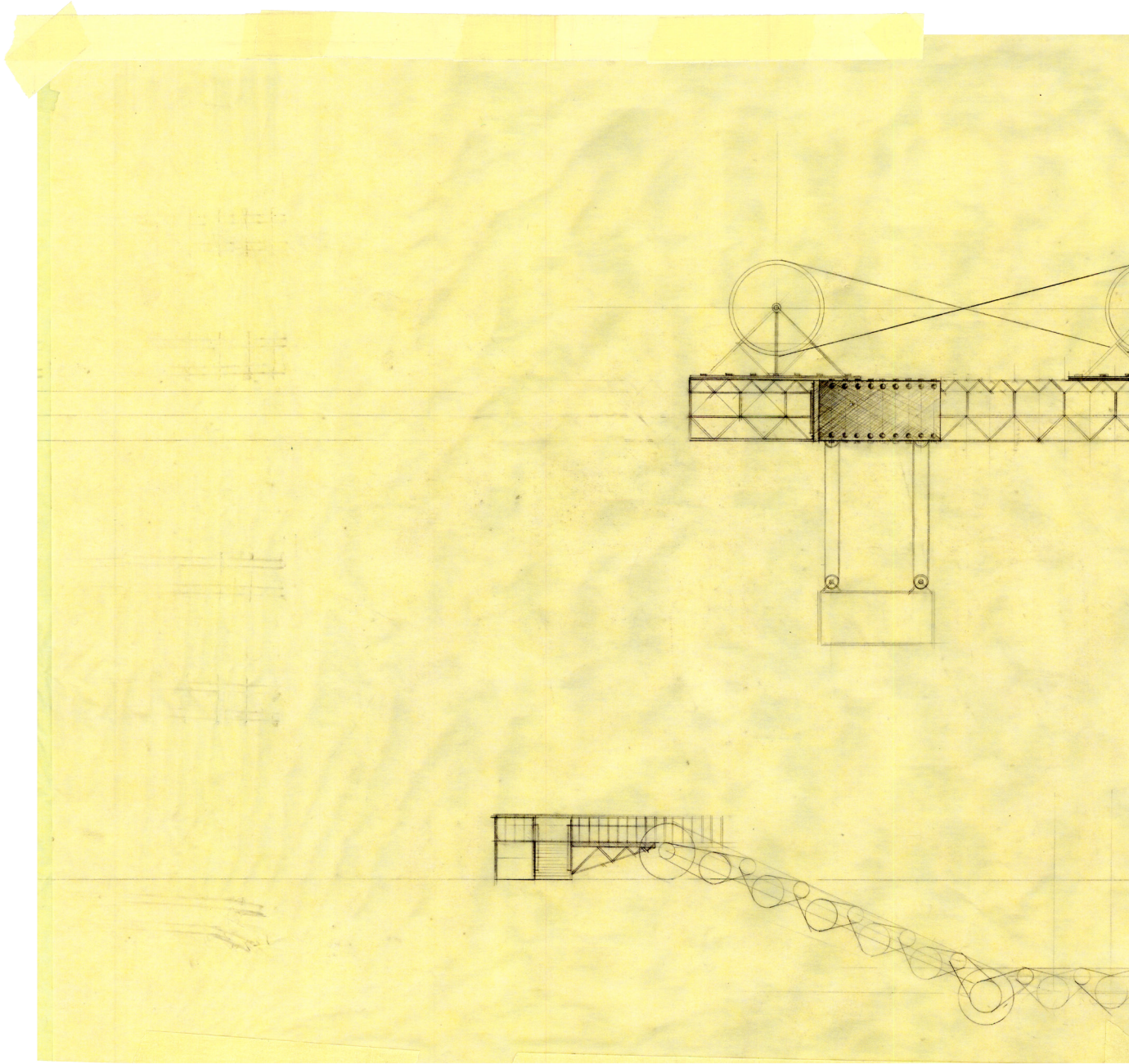
The human subject as being in the world is first a lived body. Prior to the split between subject and object, the act of perceiving displays a unique mode of preexistence. Neither passive as empirical sensation nor active as idealist construction, perception reveals one’s own body as not simply an object, a thing in itself, but a way of being present to and perceiving a world. Although body and soul are irreducibly distinct from one another, nonetheless, they constitute

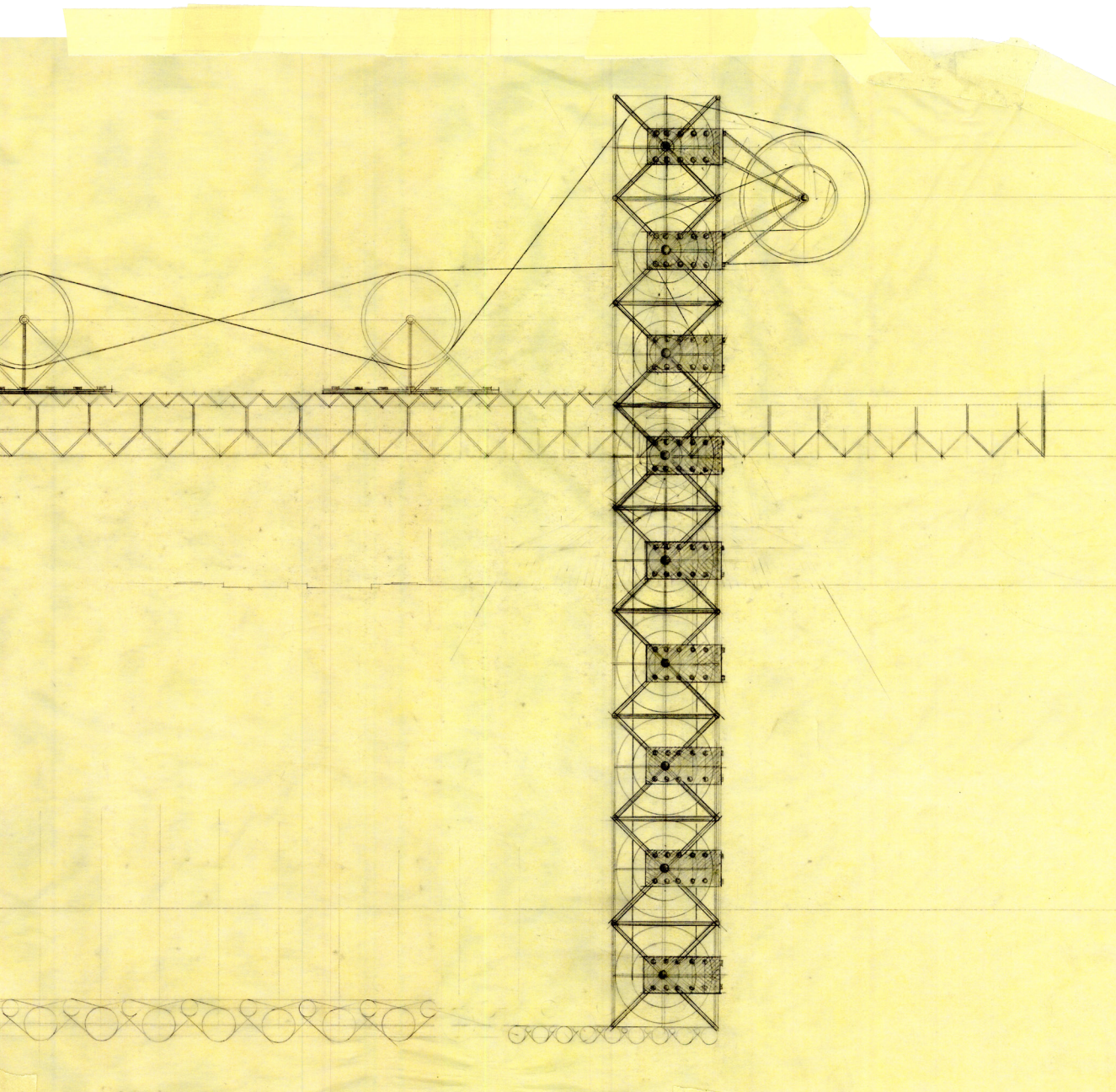
a holistic entity. Perception reveals our primordial coexistence of being in the world through understanding our body and its relation to *things*. The foundation of knowing is both perceiving and being perceived. The body is the medium of things. An object cannot exist without being perceived. For Merleau-Ponty, being human is ultimately a movement of transcendence. Human being is a transcendental being in whom a universal natural spark appears through the movement of history. From within the deep of being emerges a sense of light, a hint of Logos; as a human being creatively expresses itself, a marvel without cause and a spectacle without explanation - a primal act and the primitive fact: that Human being is in the world as the subject toward it and as the world is in the human.

The way we hear music and the way we perceive language, as the way we know how to touch or see, is a self-informing process. The act of making and the act of receiving are intertwined cannot be transferred through description, mapping, or abstraction. They are transferred from one body to another and interpreted through the senses.

T Y P O L O G Y
R E S E A R C H

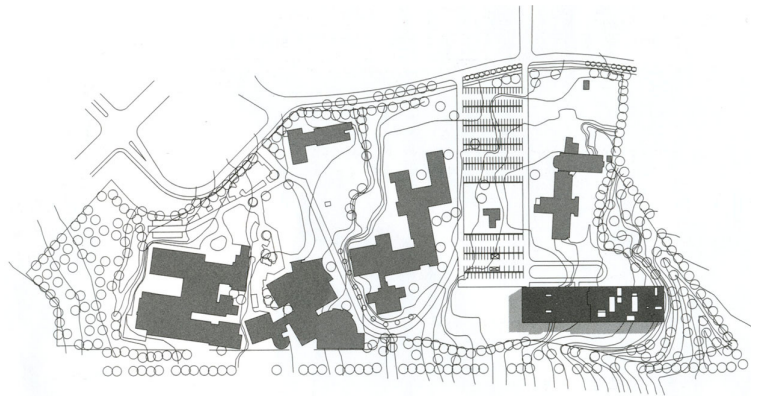
LOGICAL ARCH





REHABILITATION CENTER

Koen van Velsen

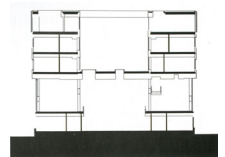


site plan

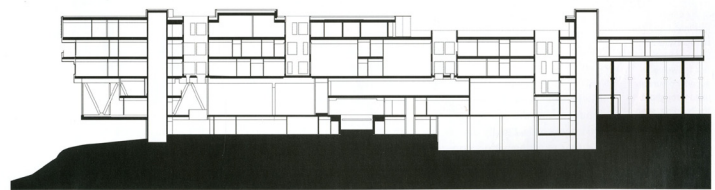
Project Type:
Medical Rehabilitation Center

Location:
Arnhem, The Netherlands

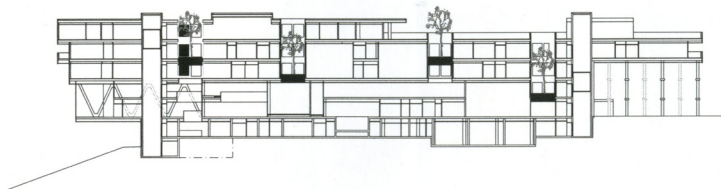
Size:
151,000 ft²



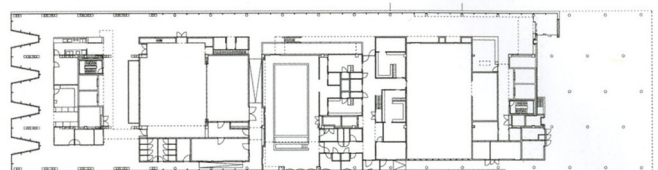
section



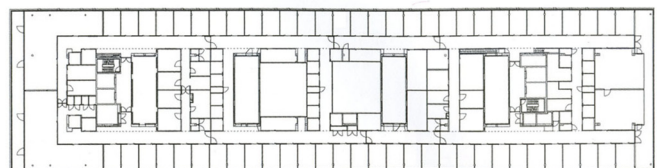
section



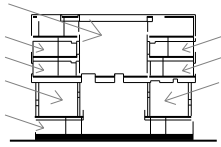
elevation



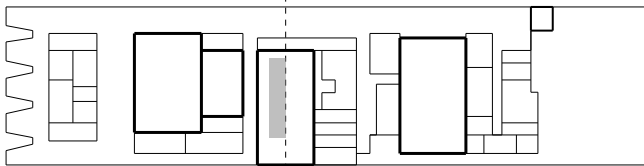
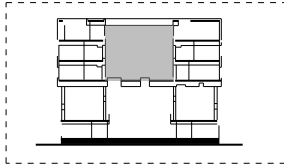
ground floor



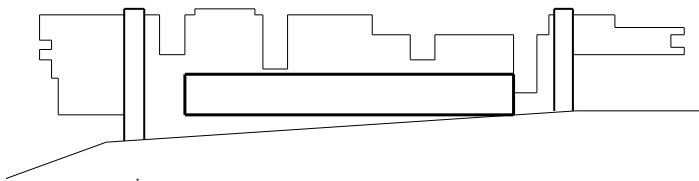
third floor



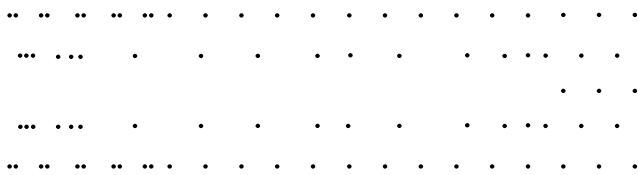
natural light



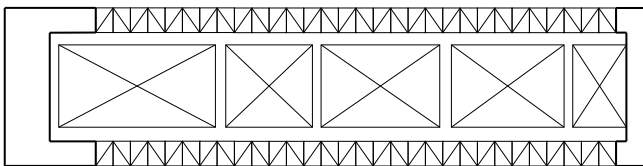
plan/section



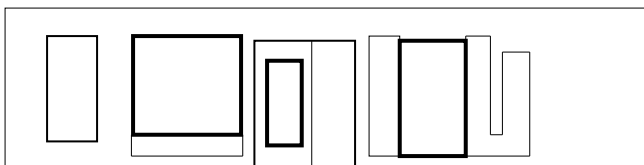
massing



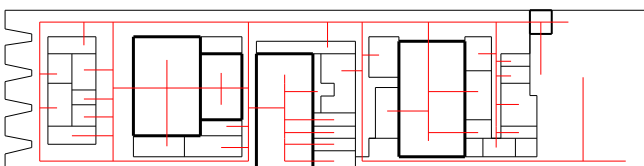
structure



geometry



hierarchy



circulation

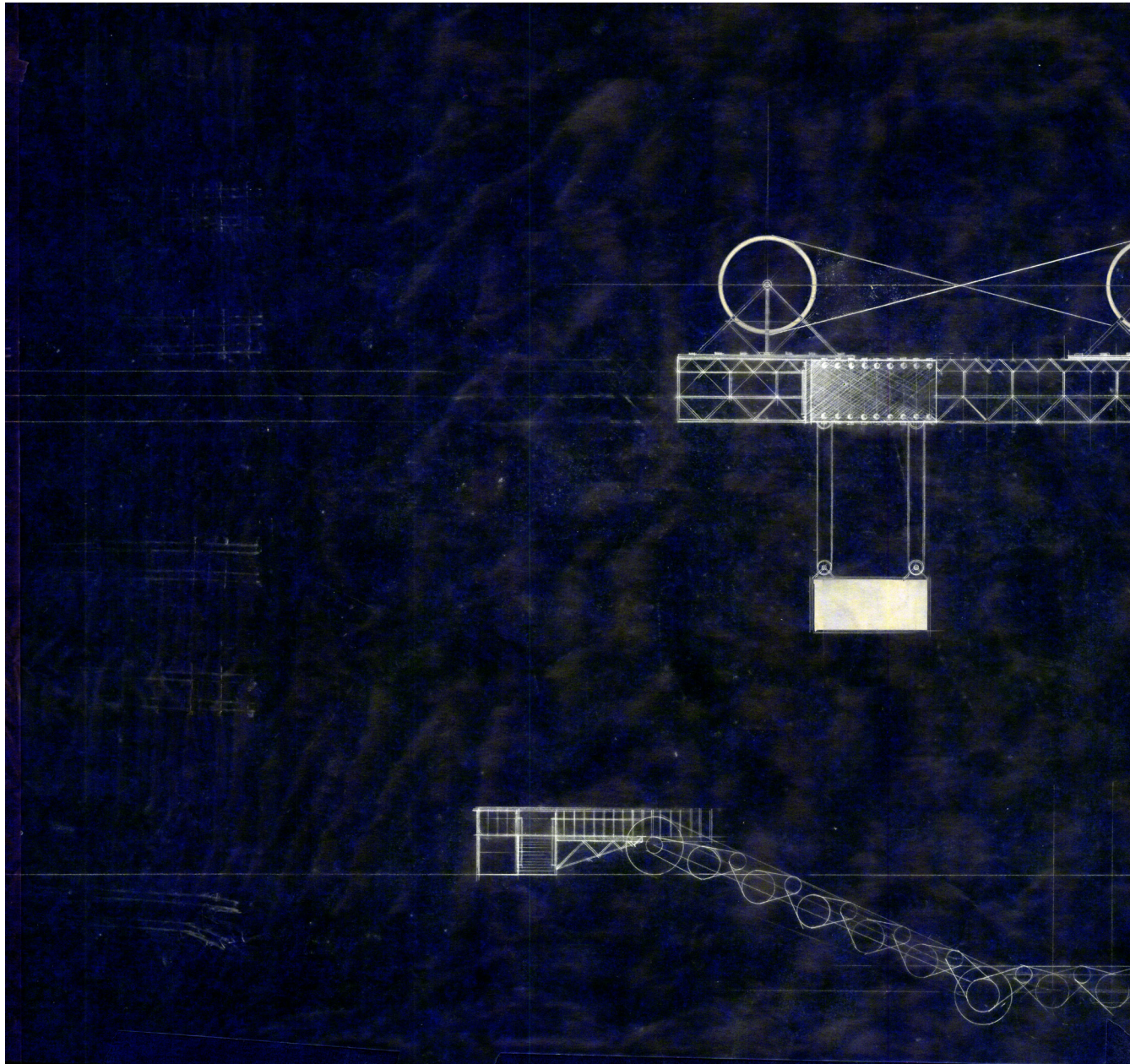
This structure is the first of a three-stage plan to consolidate and rejuvenate the Rehabilitation Center Groot Klimmendaal, its neighboring community and nearly a 20-acre forest site to the north-west of Arnhem in the Netherlands.

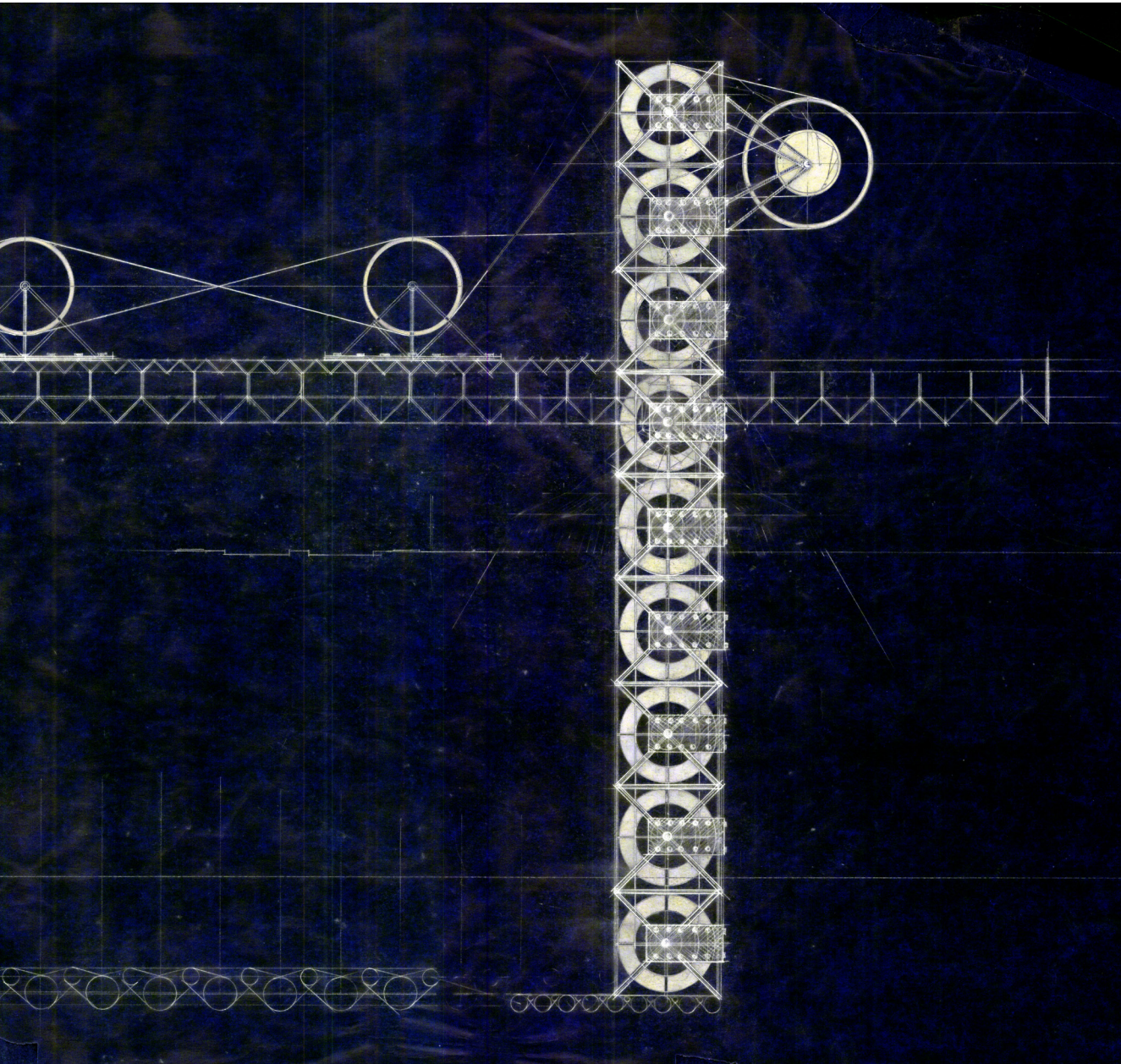
The 151,000 square foot facility provides care for children, adolescents and adults who have had an illness or accident.

The site's existing condition as an extensively developed campus of one and two-story buildings had begun suffocating the landscape. As a reaction, the re-development of the area called for a masterplan consisting of three large densely planned standalone buildings, all set within a restored and publically accessible landscape.

The interplay between solid and void, geometries of structure and skin, and the forest's constantly shifting light levels, lessens the visual impact of what is a large-scale intervention.

Parallel to the building's "generous" double height foyer is a six-flight stair linking all levels from plinth to roof on one axis, providing a direct route between all departments in a manner which encourages physical exercise. Four descending patios connect different levels of structure and bring daylight into the building's core.





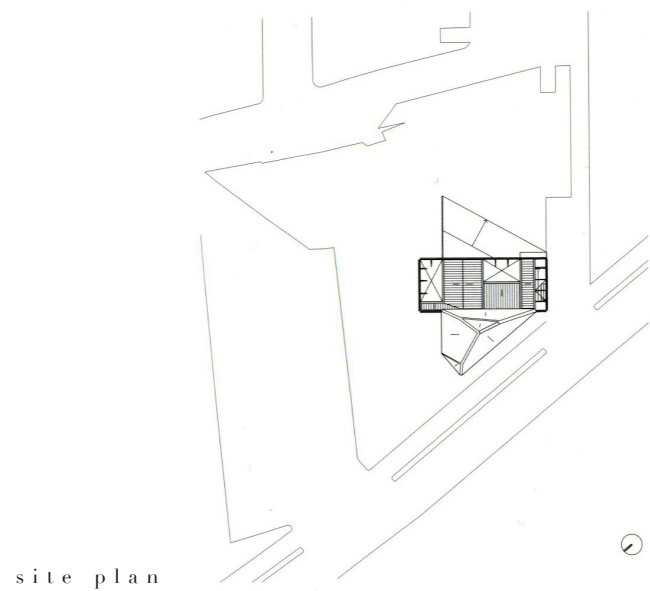
VITRA CHILDREN'S WORKSHOP

Alejandro Aravena

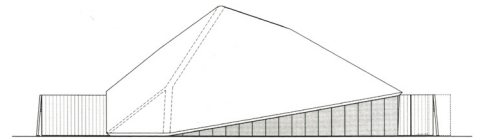
Project Type:
Workshop for Children

Location:
Zurich, Switzerland

Size:
6,500 ft²



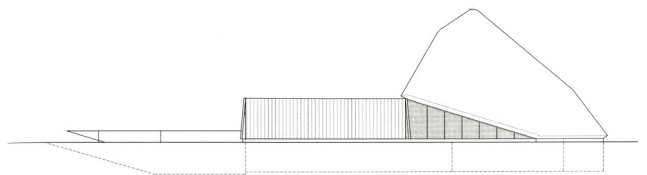
site plan



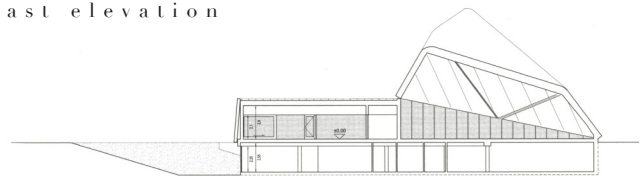
north elevation



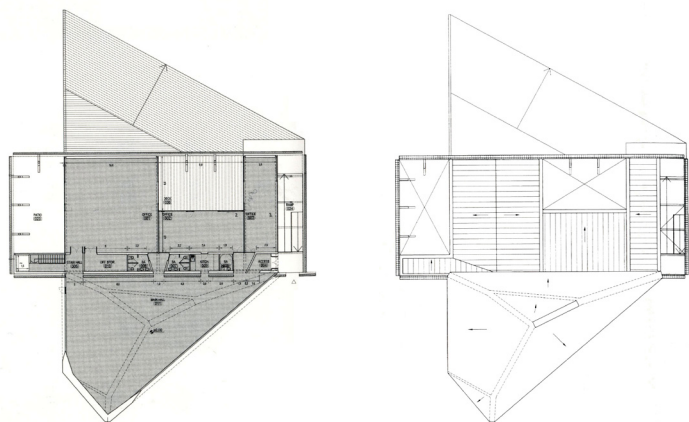
north section



east elevation



east section

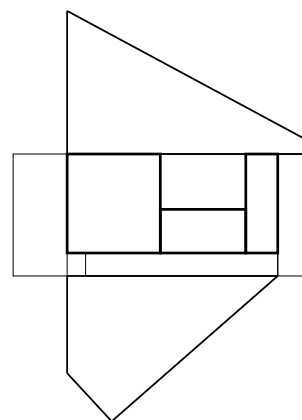
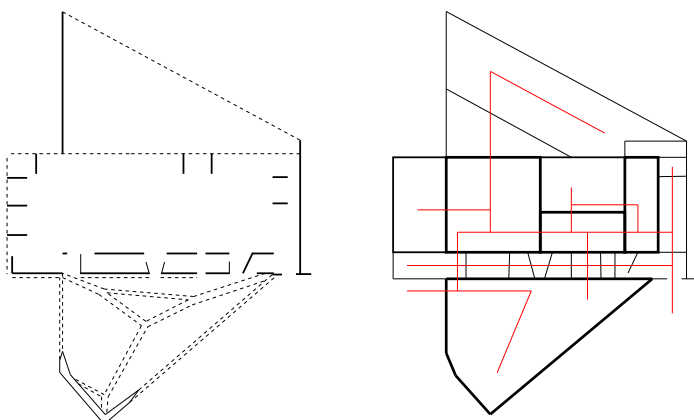
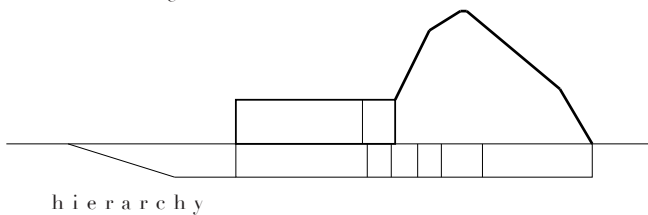
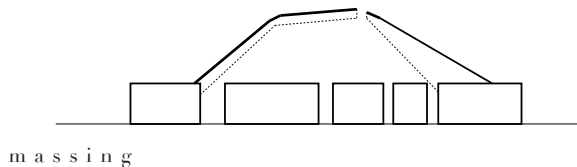
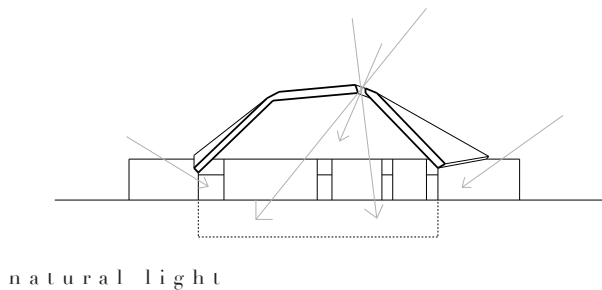
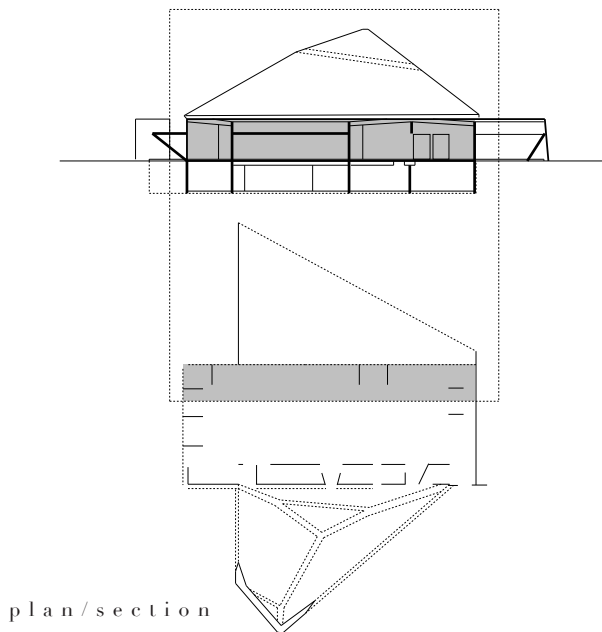


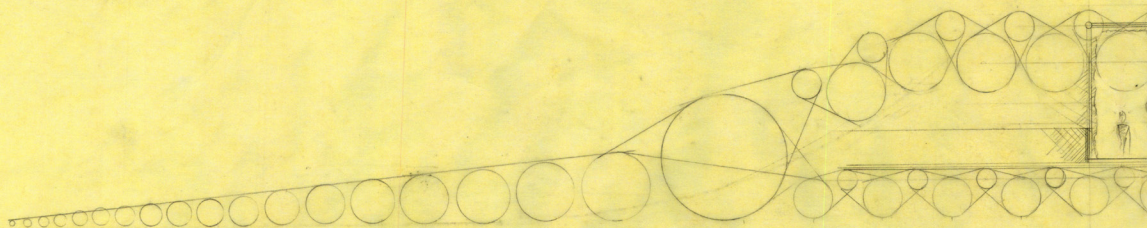
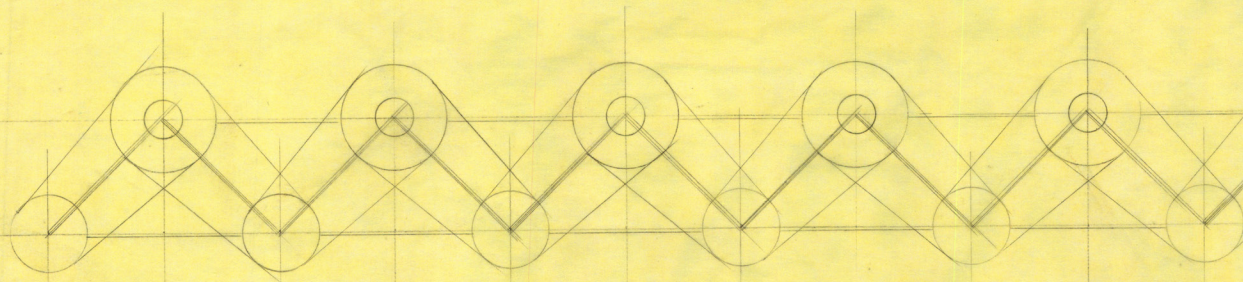
Referred to as a “direct” building for hosting workshops offered to children as an extra-curricular activity, a project that was designed to not feel designed at all.

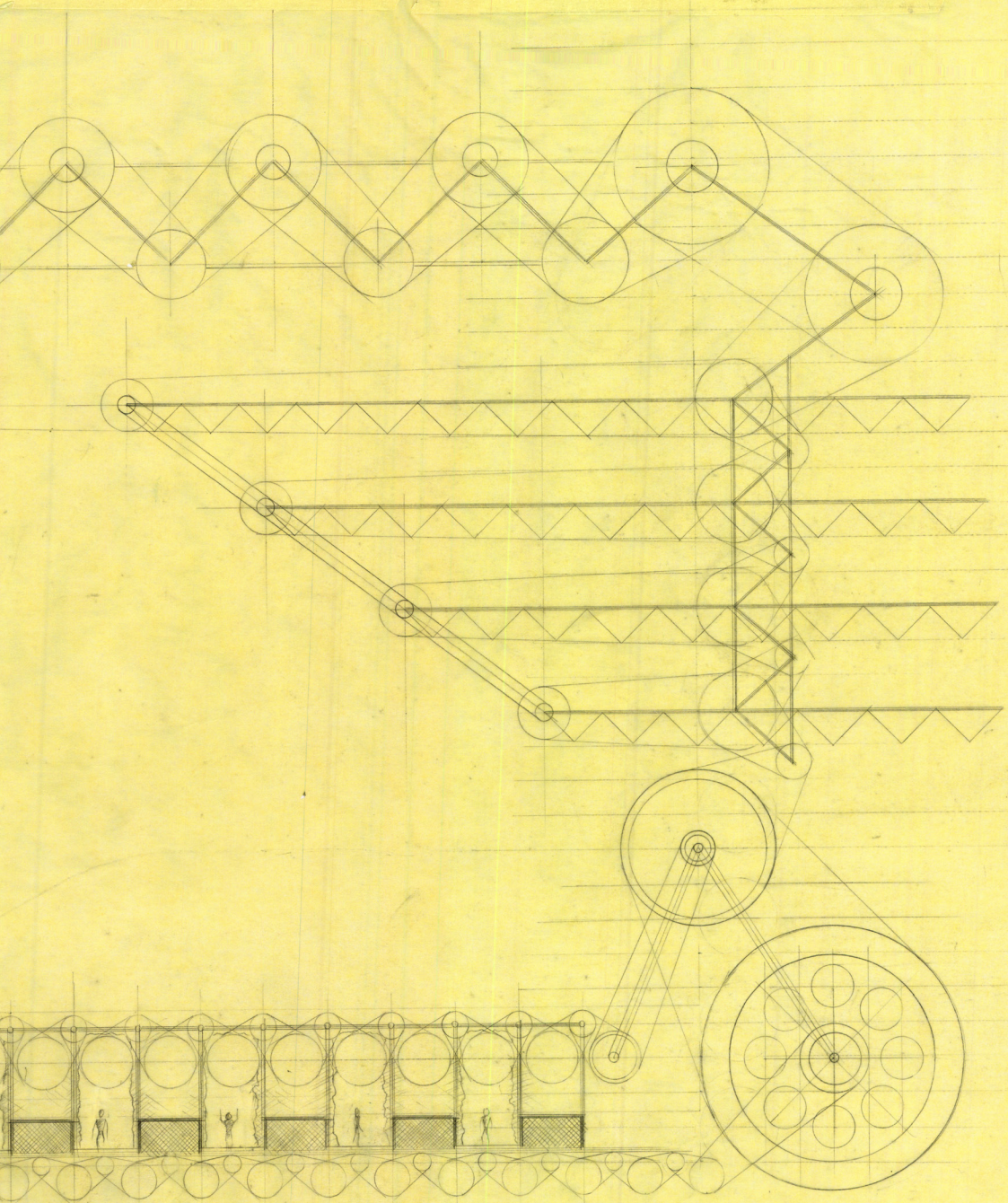
Certain issues regarding an existing building on the site posed several factors for the designers behind this project. Such constraints included, the existing building was actually a collection of small additions not flexible enough for an easy reuse, the environmental standard of the construction was very poor, in fact insufficient for an educational facility and very costly for a simple upgrade. The decision was to demolish the building entirely and start new. The decision to maintain the footprint of the previous structure informed the development of the future project.

The design intention was quite clear from the beginning: use encouraging materials. Not rough, nor low budget, but encouraging.

The final structure consists of wood, reet and a thatch roof.







REHABILITATION CENTER FOR YOUNG PEOPLE

Tarras Karasony and Peter Janesch

Project Type:

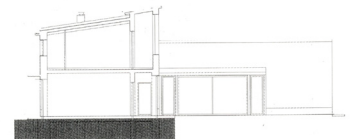
Medical Rehabilitation Center

Location:

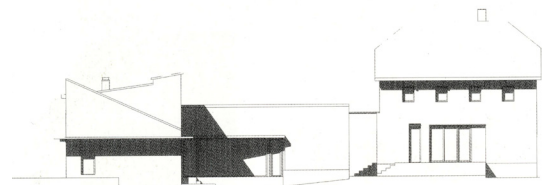
Perbal, Hungary

Size:

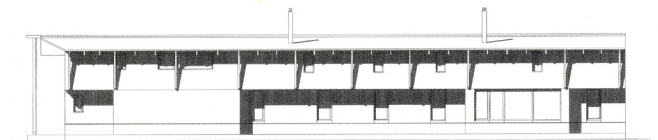
151,000 ft²



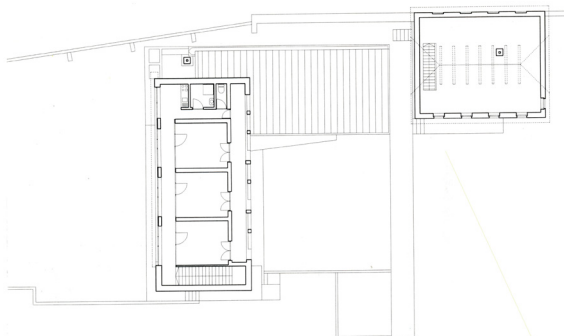
section



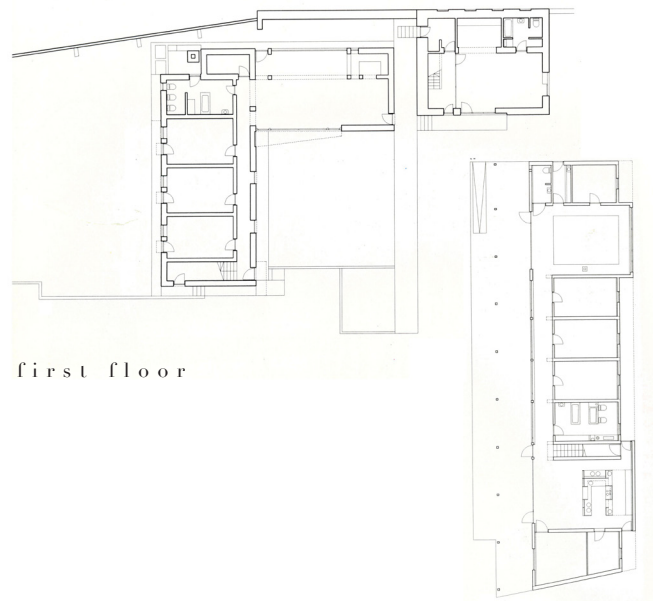
elevation



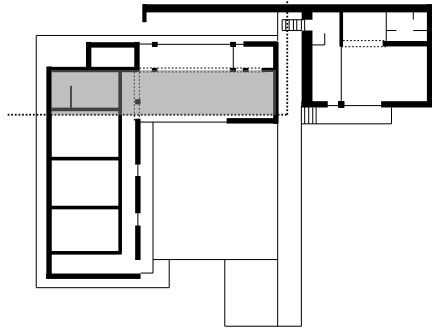
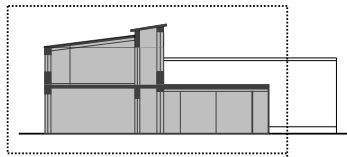
elevation



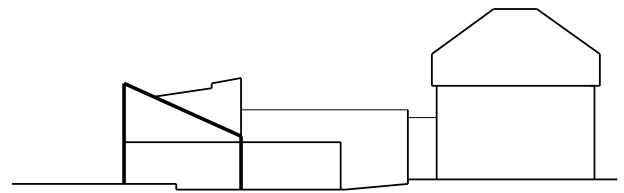
second floor



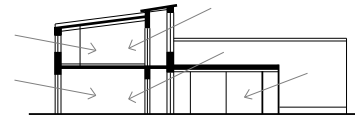
first floor



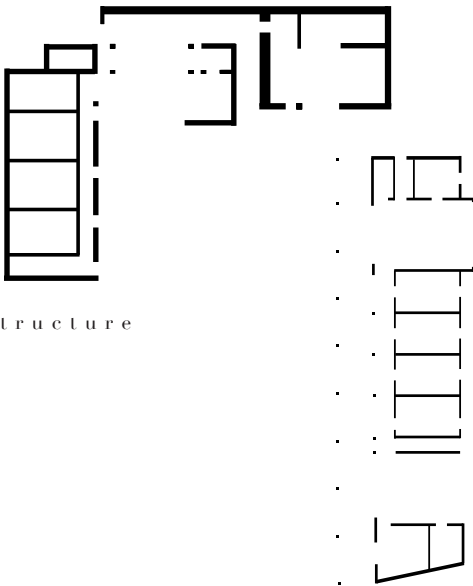
plan/section



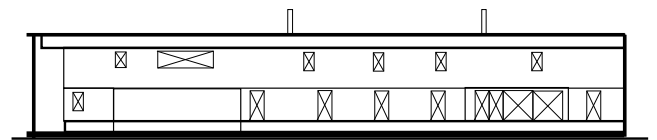
massing



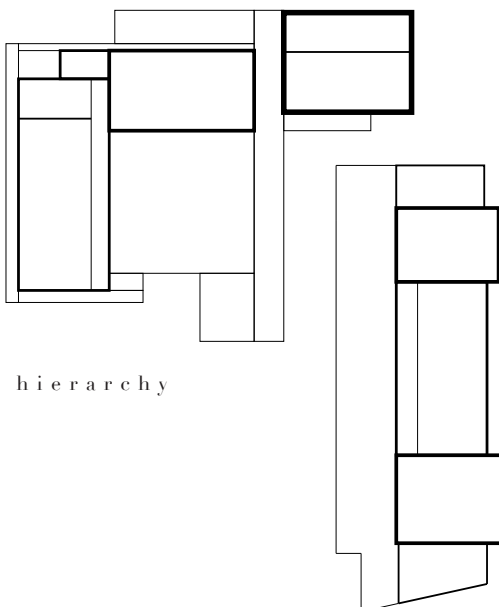
natural light



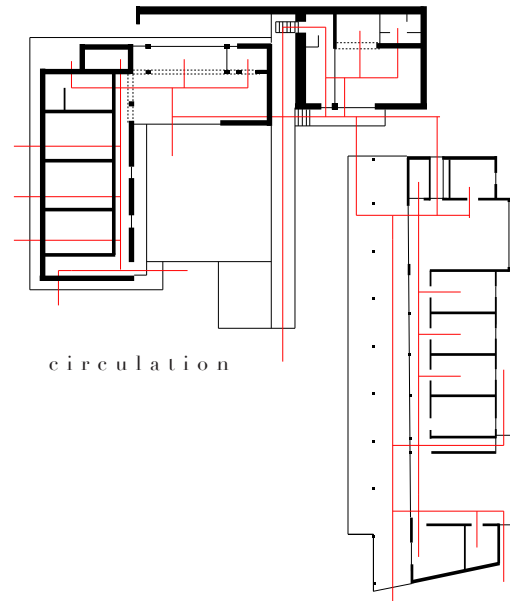
structure



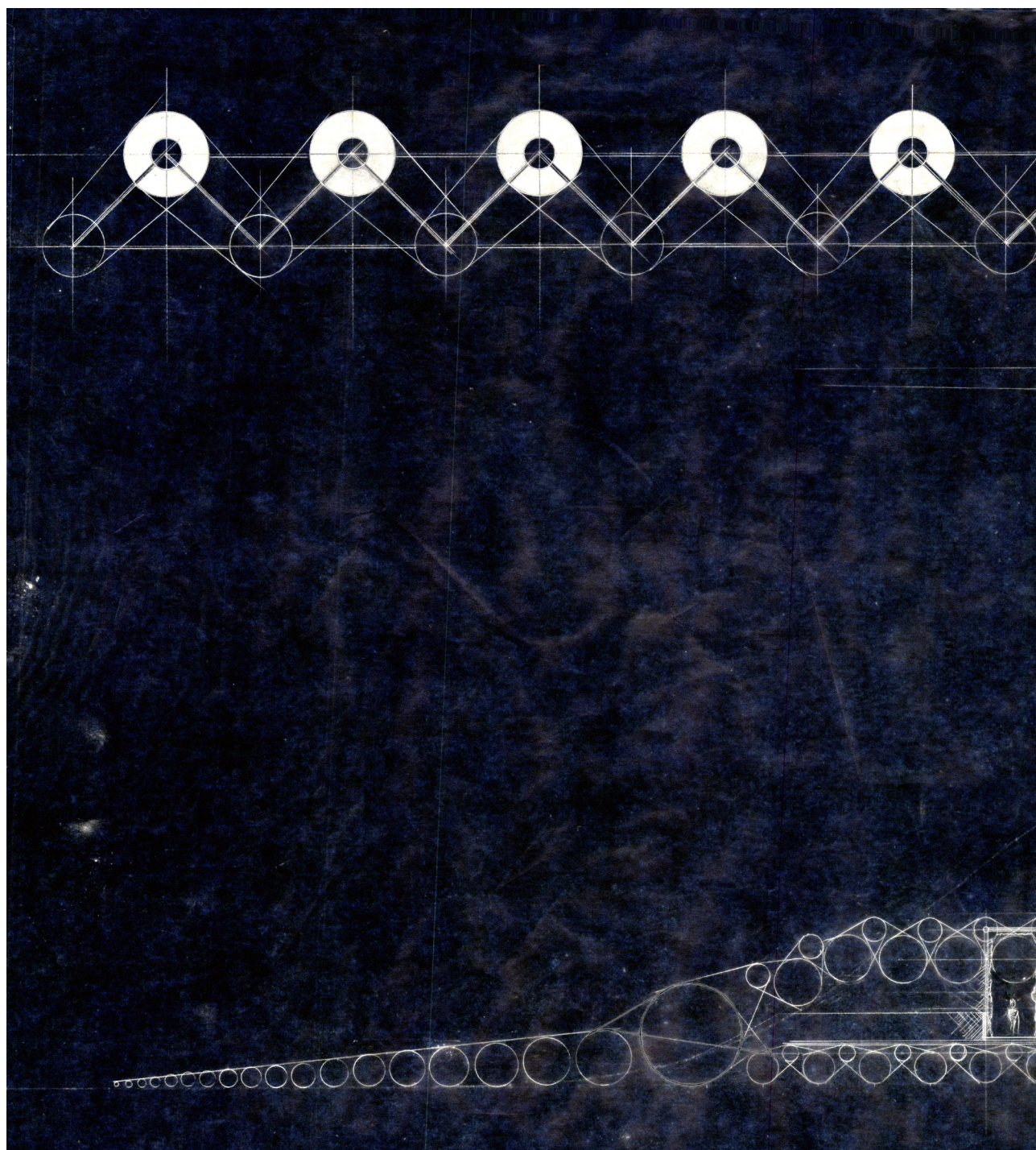
geometry

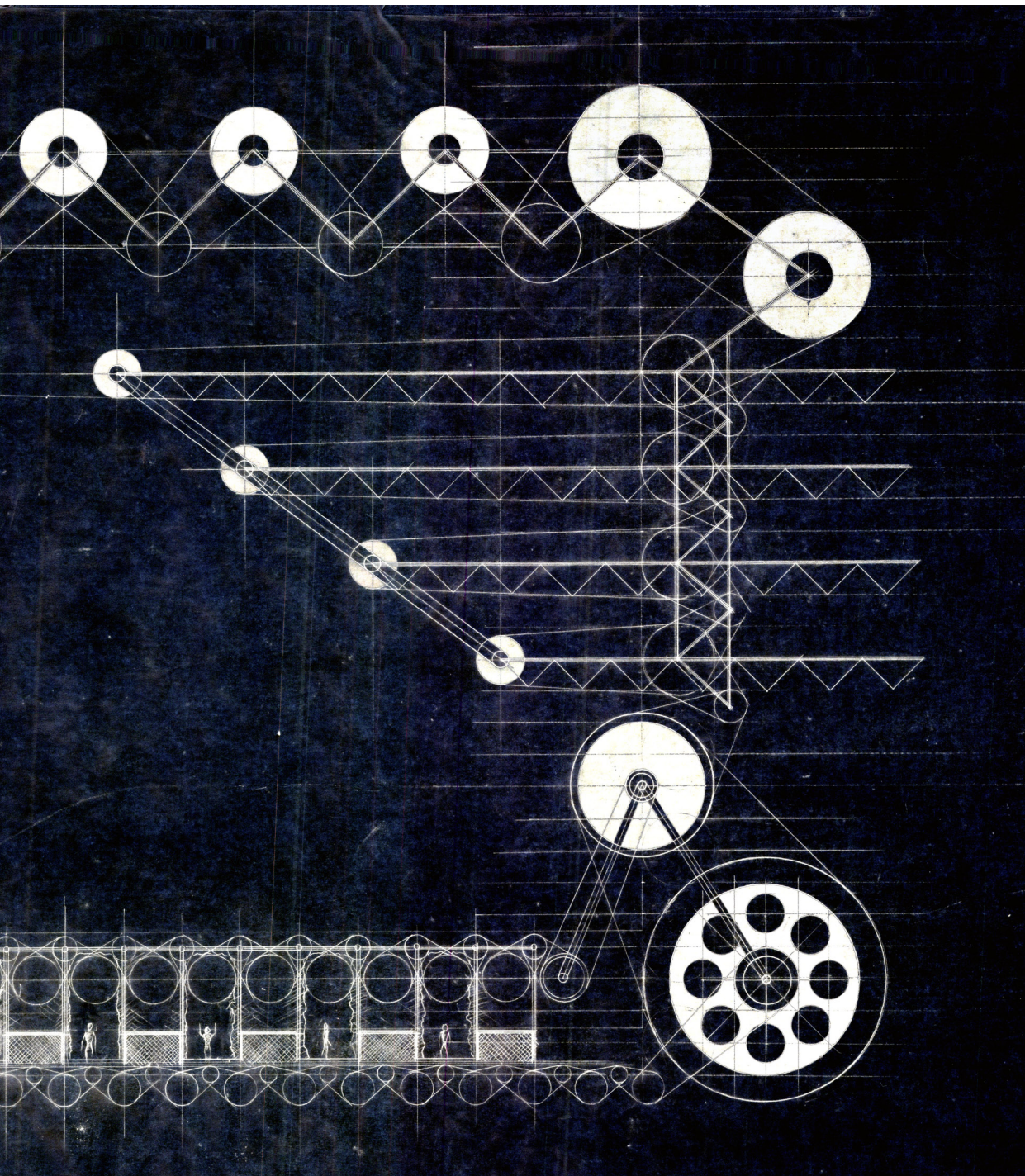


hierarchy



circulation





SUMMARY

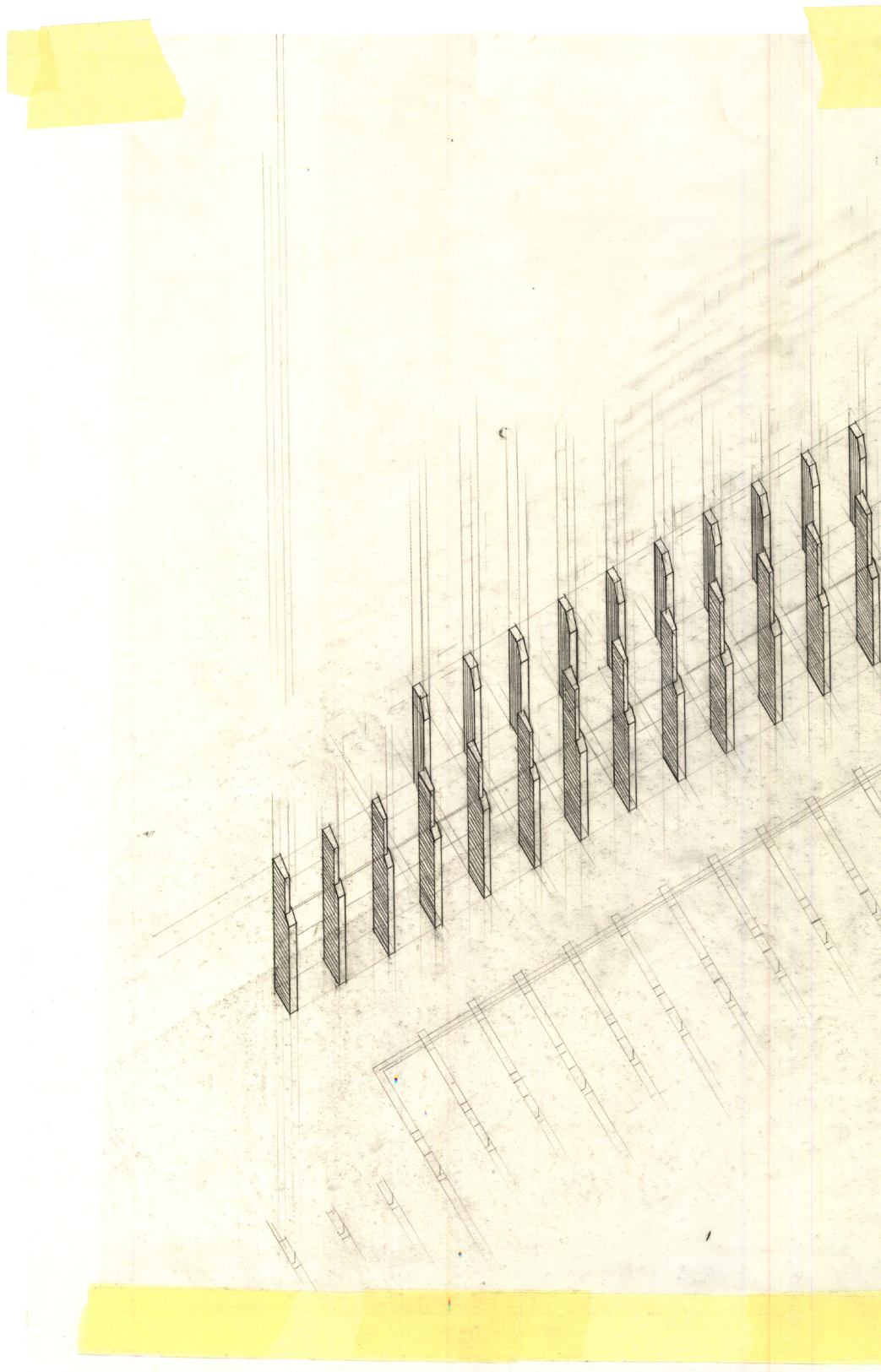
The initial development of this thesis, specifically with regard to the theoretical premise began with the inclination to pursue a typology that dealt with either the body or mind as a means for exploration. Preliminary avenues of research dealt with the breaking down of an individual's psyche by means of solitary confinement as found to be methods used by correctional institutions, specifically ones that foster the use of isolating a human being for a length of time which would eventually lead to the destruction of the individuals perceived reality. From there, one could pose the theory that a reconstruction of an individual's reality could be possible. My intended medium for such reconstruction would be through an engagement with a natural environment, surrounded by materials and tactile experience which could influence how that individual's new perception of both self, and self within the world had been shaped by an architecture designed to be a re-shaping of the human condition by inhumane and somewhat torturous methods.

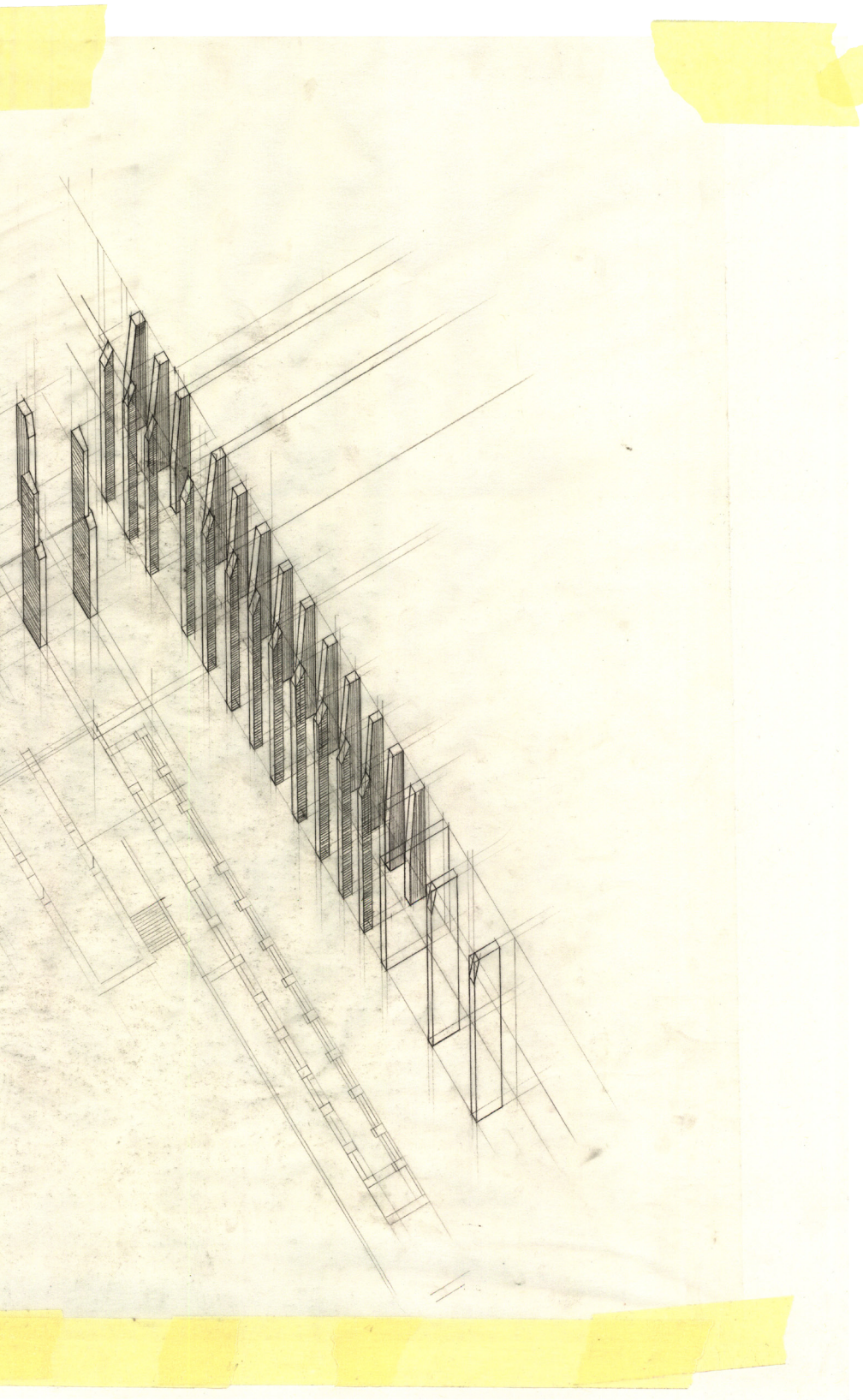
However, the idea that one exhibits the power to deconstruct the perception of an unwilling being seemed quite paradoxical in relation to my interest within the subject of perception. I therefore chose not to assume the power to deconstruct an individual's framework of reality but instead the notion of re-constructing an already fragile or in the case of many men and women returning from military service, a framework that has undergone in some cases severely traumatic alterations.

The case studies I chose for typological study differ in physical location, scale and to some degree, programmatic functions. However they all share a commonality that they exist to facilitate in one way or another the healthy development of individual psyche through a physical involvement with space, objects and other individuals connected on a larger scale yet which is the common nature of a particular context. I was particularly excited about the Rehabilitation Center in the Netherlands because of its particular site location. Similar to the site I have chosen outside what now used to exist as the Walter Reed Army Medical Center in Washington, D.C., the site for the project is embedded within a 20 acre plot of dense vegetation and forest. It also shares the fact that it too deals with the redevelopment of a recently closed compound consisting of several buildings deemed unfit for reappropriation.

H I S T O
C O N

R I C A L
T E X T





AMPUTATIONS AND WAR

In the United States today, upper extremity amputation is most frequently related to work-related civilian trauma. However, the majority of the writings and work done in the field of extremity amputation and rehabilitation is perpetuated by man's inhumanity to man - war. War has been a driving influence, an impetus to develop techniques for amputation surgery, prosthetic design improvements, and the development of specialized centers of care for victims of war. The history both arm and leg amputations dates back for centuries, chronicling the stories of war injuries sustained by men in battle.

Major General Norman Kirk, Surgeon General of the Army during World War II and known for his broad knowledge of the history of military related arm amputations has traced practice of arm amputations back to the Hippocrates, who were apparently the leading innovators within the field regarding the treatment of gangrene. Supposedly, amputation of the gangrenous extremity at the joint below "the boundaries of the blackening" as soon as it is "fairly dead and has lost its sensibility."

For a period of time in history, amputation seemed to have been indicated solely in cases of gangrene and always as a last resort. However, several centuries later it had

become a recognized procedure for ulcers, growths, injuries, and even deformities. A popular yet primitive technique was to place a tight circular bandage above the intended line of severance and cutting down on and either tying or sewing any major blood vessels. Caution was recommended for the cases that were particularly bloody.

Recordings of advancements in medical procedures were discovered around the second century A.D. addressing hemorrhaging in arteriotomy for aneurysms. Just half a century later, the notion arises that ligatures should be made of a material that is does not rot too quickly if not at all. However at the time, no connection of these discoveries were ever tied to procedures of amputation.

In 1517, Gersdorff I published the first printed book to contain a woodcut illustration of an amputation which the surgeon used two circular constricting bands no more than a finger-width apart and amputated between them. Along with the depicted surgery was an elaborate recipe for a styptic, which was intended to control the bleeding.

It wasn't until 1616, soon after man had discovered the circulation of blood within the human body (ultimately leading to the

development of the tourniquet in 1718) when a means for controlling hemorrhage during amputation.

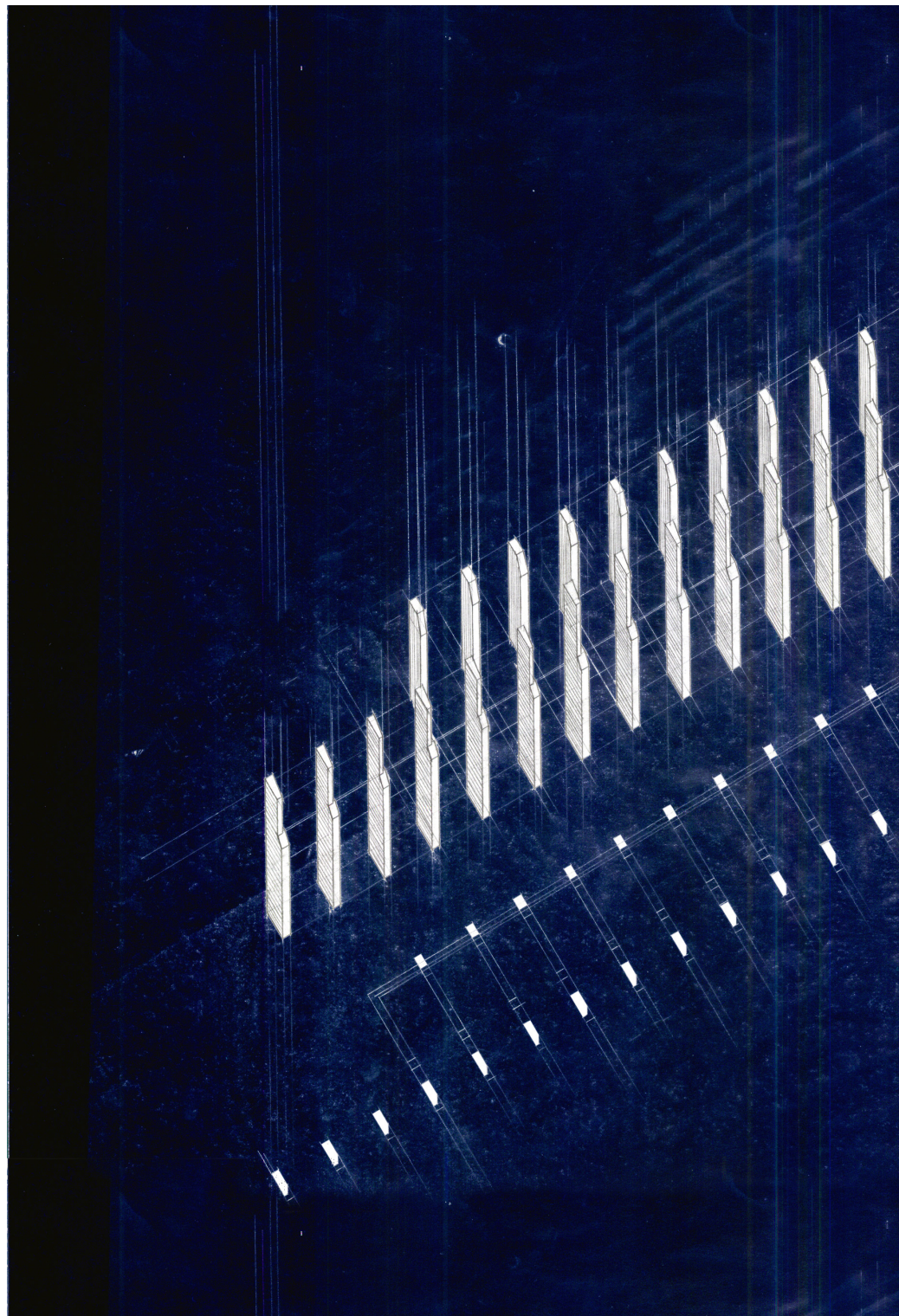
The existence of both anesthesia in 1846-47, and aseptic surgery allowed surgeons to produce a viable amputation stump capable of supporting prosthetics. The introduction of sulphuric ether at the Massachusetts General Hospital in 1846 birthed a period of rapid progress, forgoing the need for speedy surgeries to lessen both the pain and the distress of patients.

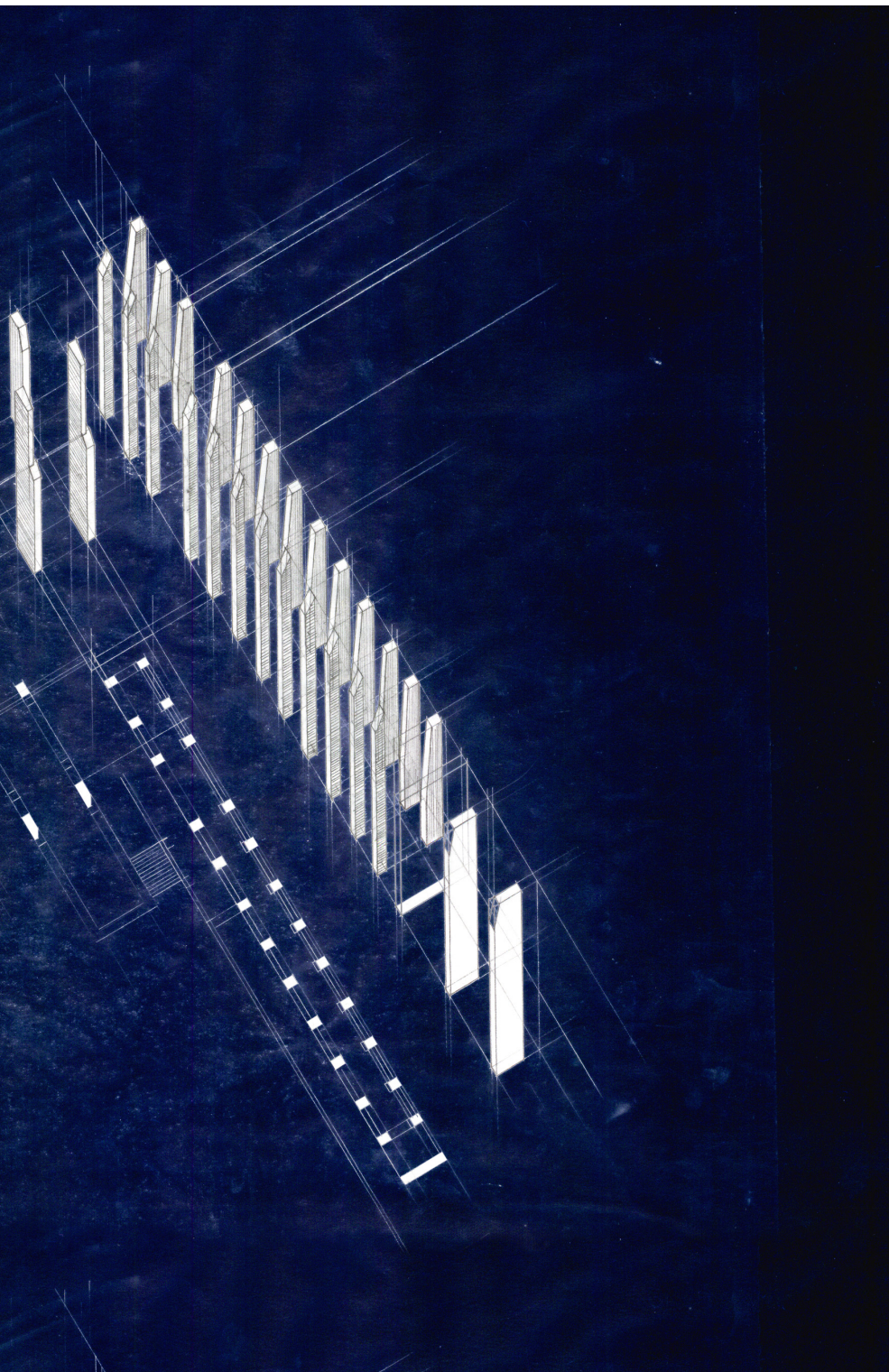
The arrival of antiseptic technique came too late for the U.S. Civil War being as though closed methods of amputation were not considered safe, however it was first used by the military surgeons in the Franco-Prussian War.

Mankind's understanding of arm amputation and its rehabilitation is undoubtedly owed to the overwhelming statistics of the Civil War. In total, the war tallied nearly 253,142 wounded soldiers, 20,559 of which had significant amputations. The most common major operation of the Civil War was that of extremity amputation indicated most commonly by a badly lacerated extremity or the presence of a compound fracture.

Dr. Donald Slocum, who has published a comprehensive text title, "An Atlas of Amputations" indicates in an article on wartime amputations, that the improved management of extremity trauma reduced the incidence of amputation from 8.5% at the time of the Civil War to 1 - 2% at the time of the Vietnam War. Similarly, improved treatment of extremity trauma decreased mortality from 35% during the Civil war to 3 - 4% during the Vietnam War. (Slocum 1949)

Between 1988 and 1996, a total of 1,199,111 hospital discharges was studied as a way of establishing a basis for amputation codes of discharging patients. 133,235 limb loss-related discharges occurred per year.





PROJECT GOALS

Academic

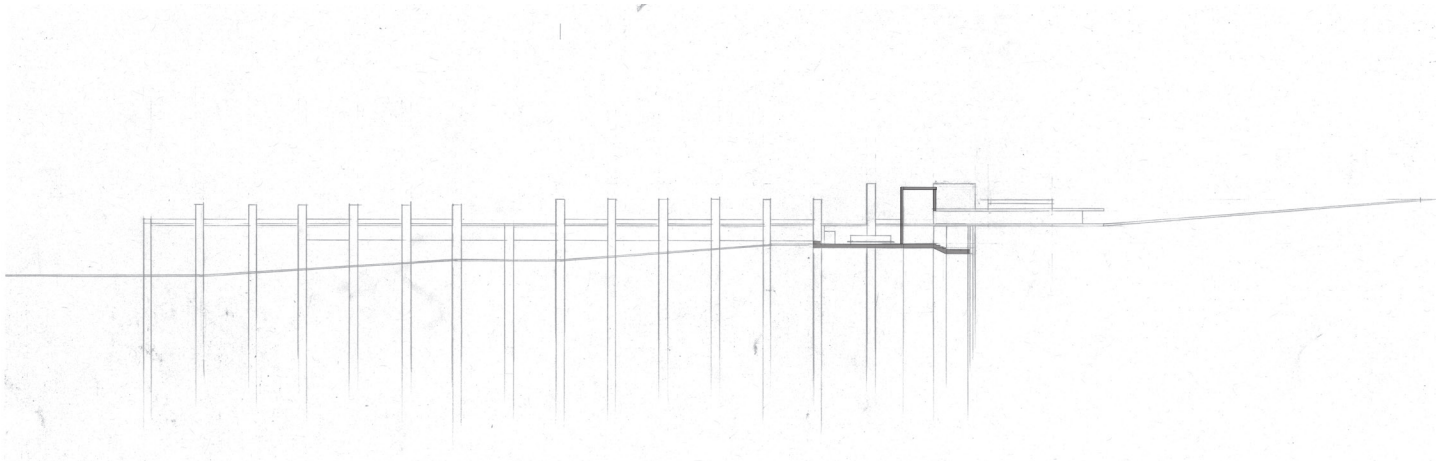
What I have come to appreciate about working in an academic environment is the reality that one has the freedom to explore unknown territories with a rigor unmatched by any other institutional body. The limits of pursuit are truly bounded by nothing other than the comforts provided by the familiar things we experience everyday. Curiosity has always been something I have regarded as inherent toward my personality, and the idea of being confronted by something new is the motivation which fuels my passion to create. In my experiences as an individual the role of the academic environment is something that I will always remember and regard as the medium for which individuals can confront raw potential and through an engagement with it, turn what was once a raw potential into polished and refined talent. I hope to continue to push the realities of my own understanding in the act of making alongside the energy of my like-minded peers. The physical place of academia is potent with fresh ideas and body's capable of truly creating change for experiences to come afterward.

Professional

Certain naive tendencies, often inherent within academic attitudes is that once the role of the professional is established, the once ever-present ambition to change the world is curbed by the hidden forces of business transactions and consequences of the "real" world. I feel confident in making this assumption because I was once a naive tadpole swimming in unknown territory believing that the boundaries of my world could not possibly exist past the shallow end. Into the cold, dark ocean floor I swam to discover that the angst which used to motivate my ambitions to succeed as a professional outside of school were simply misappropriated. Through this experience that is this thesis project, my goal is to expand the horizon of my world and through my creations allow others beyond the boundaries of the academic institution feel my presence within the world of architecture. This is, however, perhaps a faint remnant of the once naive tadpole who once felt fearless in the comfort of the shallow, but now feels limitless in the depths of the unknown.

Personal

Regarding my personal affection toward this project, and other projects that have come before, I believe the act of separating one's work, both academically and professionally from myself as an individual. For I believe that I myself am defined as a member of both, and although I know a world outside of architecture, the memories and experiences shared with those who acted as both motivation and inspiration will forever influence my role as the academic, the professional, and most significantly, the person.



S I T E A N

N A L Y S I S

NARRATIVE

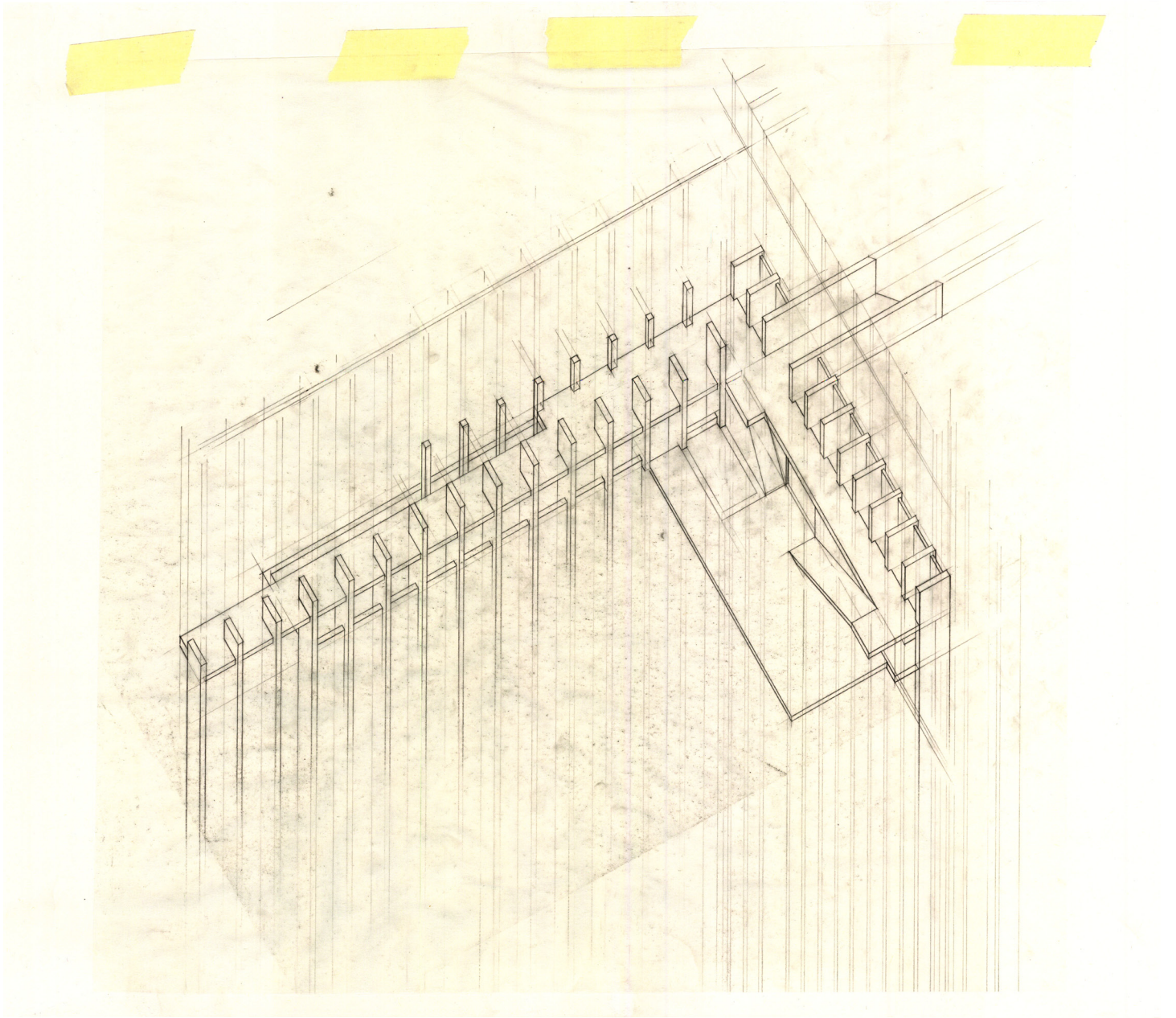
The taxi ride from Reagan International Airport to downtown D.C. was like a slide show of the Capital's prominent existence. I sat quietly as if in front of a TV screen while passing numerous historical monuments that have stood in place longer than I have been alive. Flocks of tourists scattered across the inner city's landscape like pigeons feasting on bird feed. The historical significance of what was before my eyes was almost too much to digest during the fifteen-minute cab ride. It wasn't until I stepped out of the cab when I could get a good sense of the environment. The history of D.C. juxtaposed with modern day society elucidated a surreal feeling of being lost while knowing exactly where I was.

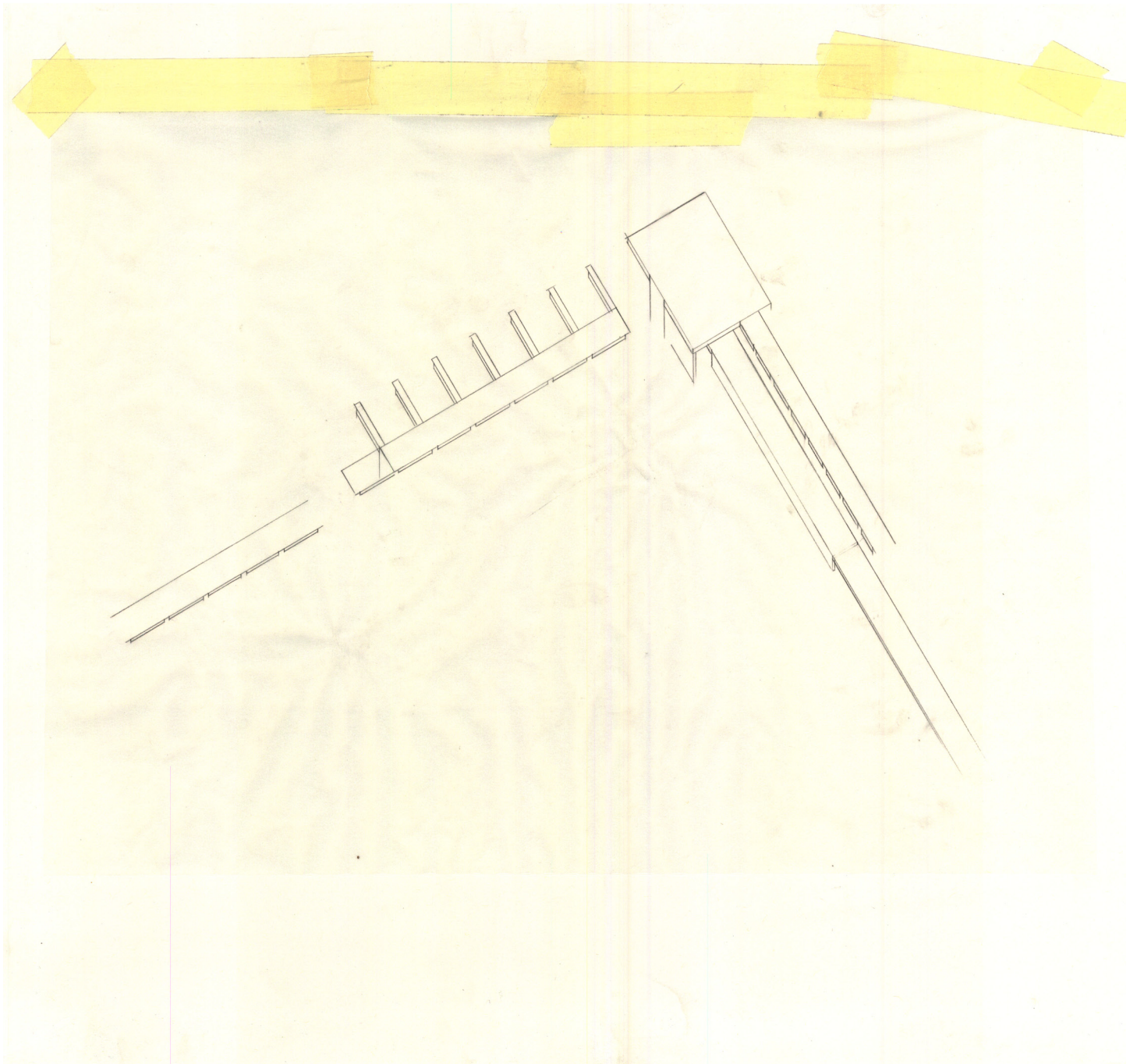
After settling into the hotel, I established my bearings and headed toward my site: the Walter Reed Army Hospital located in the Takoma Park district just north of downtown. Or at least I imagined it was just north of downtown. After twenty minutes on foot the realization that I hadn't even made it half way urged me to pursue investigating the local metro system. I used my phone to locate the nearest rail station which was located underground just a few blocks adjacent to my destination. After a bit of confusion I was able to navigate my way on the Red Line headed for the Takoma platform. The inner working of Washington's underground railway was an experience that revealed a true sense of place; dark, dingy, and potent with aromas of stale beer and body odor. It was then when I truly became a part of the human workings of this particular metropolitan district.

A twenty minute commute landed me in a place far from that of downtown D.C. Most of the buildings were tagged with graffiti and it seemed as though I couldn't walk half a block without spotting a parked squad car. My instincts led me to the assumption that it wasn't unusual to be in the presence of such high security. Walter Reed was just blocks from the platform, and as I got closer a strange sort of isolated from the rest of the world feeling set over me. Streets were empty, sidewalks were vacant, and I felt alone. I was no longer situated in a highly gentrified and culturally diverse environment, I was a tall, young Norwegian walking through a part of town that would make most people from the Midwest feel uncomfortably terrified. And to make matters more interesting, I had my touristy messenger bag and most of all, a camera. People stopped and stared as I took photographs of the surrounding context and run down buildings. In my mind, I was there for a reason, to investigate something unfamiliar.

It wasn't long before I reached the gates of Walter Reed. My previous research of the compound had me believing it was much smaller than I had come to find out in person. The entire facility was gated off with signs forbidding those who had the inclination to trespass. Constant warnings of "Government property, no trespassing!" and "ALL activity is monitored by surveillance" initially took me by surprise, almost sending me back to the platform in Takoma. However the







desolate and ghost town-like vibes urged me to move on and photograph whatever I felt was interesting. I walked what seemed like hours around the several acre complex, photographing the condemned institution without the slightest hesitation. I finally reached what was my initial target, the body of preserved environment just adjacent to the massive complex, Rock Creek Park.

What initially drew me to this particular site was the park itself. It, much like the former military complex was incredibly vast in size. To me it felt as large if not larger than Central Park in New York City which given its location next to an army hospital north of the nation's capital seemed all too significant to ignore. The entrance to the park is a threshold, which I will never forget. Beyond just one busy two-way street was the most magnificently preserved environments I had ever encountered. Trees seemed to stretch to the clouds and the soil was rich with moist grasses and fallen leaves. There were several teenagers walking up the single paved path (motor vehicles were prohibited in the park) with their long boards so I took a seat on the hill to take a moment and photograph their descent down into what to me was an unknown territory. After, I followed on foot, slowly, as to absorb as much of what I was experiencing as possible. Perhaps it was by mere chance that this gem of a discovery was located right next to a shut down army facility, being as though my intention for this project was to allow those returning from service a "natural" means of rehabilitation.

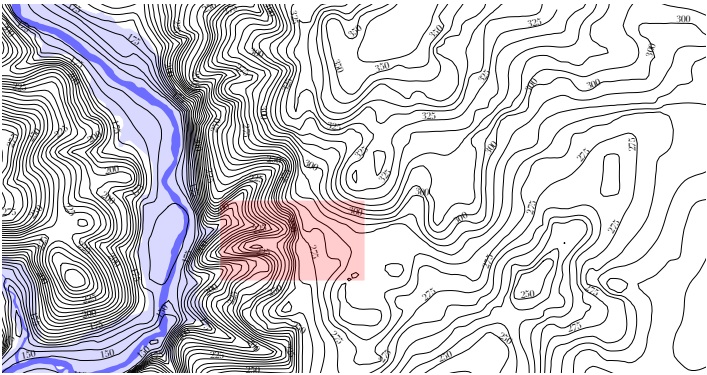
I spent several hours walking throughout Rock Creek Park, taking note of fallen trees and eroded soils. My main guide was the creek itself, which had a trail on each side of it for joggers and pedestrians like myself to take in the natural beauty surrounding the park. Just as it got dark I managed to find my way out into a quite neighborhood and eventually back to the busy street alongside the former hospital. Walking toward downtown, with the park on my right, I decided that the park itself would serve as the perfect medium for rehabilitation. The juxtaposition between the upcoming redevelopment of the Walter Reed complex and the preserved park was a perfect metaphor for the rehabilitation of individuals returning from armed service. The undisturbed nature of the park would be the foundation for one's memory before heading off to serve our country, and upon return, the redevelopment of the former compound would serve as a reminder of how one should accept change, as an environmental stand-point and one that deals with the human condition.

TEXTURE
VEGETATION
DISTRESS
BRIDGE
SIGNAGE
HUMAN USE
WATER
LIGHT

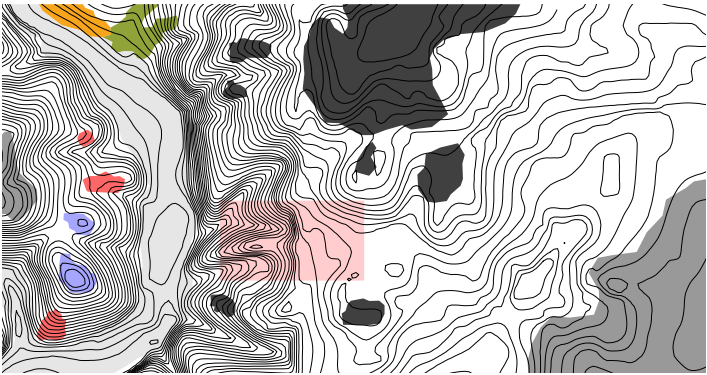




CONTOURS



GEOLOGICAL



Soils & Vegetation

Strata	Species
Canopy	<i>Fagus grandifolia</i> , <i>Quercus alba</i> , <i>Liriodendron tulipifera</i>
Sub-canopy	<i>Ilex opaca</i> , <i>Cornus florida</i>
Shrub Layer	<i>Viburnum acerifolium</i>
Herbaceous	<i>Uvularia</i> spp., <i>Parthenocissus quinquefolia</i> , <i>Polygonatum biflorum</i> , <i>Polystichum acrostichoides</i>

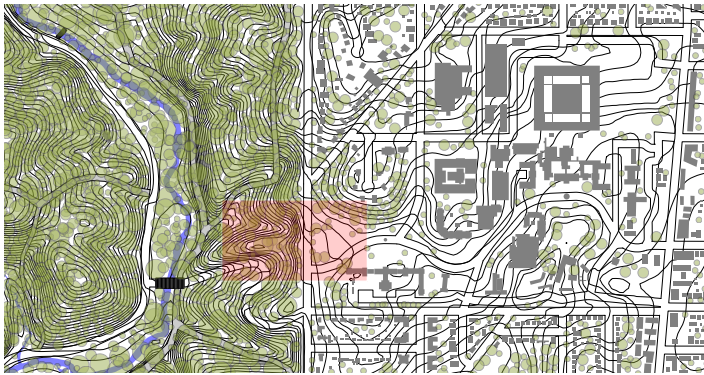
Geological Data

Color	Classification	Specific Type
Black	Cenozoic Coastal Plain Deposit	Upland Terrace Deposits
Dark Gray	Cenozoic Coastal Plain Deposit	Sand-dominated lithofaces
Light Gray	Quaternary Surficial Materials	Alluvium (Holocene)
Red	Quaternary Surficial Materials	Terrace Deposits (Pleistocene)
Blue	Cenozoic Coastal Plain Deposit	Terrace Deposits (Tertiary)
Green	Quaternary Surficial Materials	Upper-level Fluvial Deposits
Orange	Quaternary Surficial Materials	Low Level Terrace Deposits

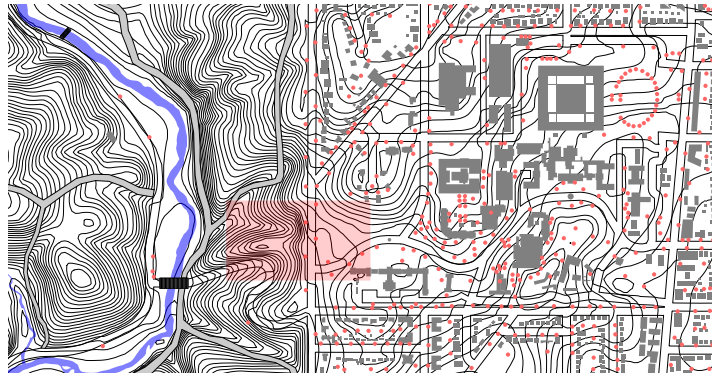
BUILDINGS



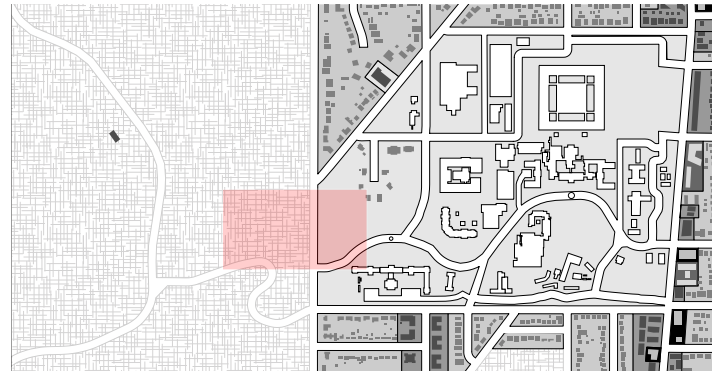
TREES









UTILITIES



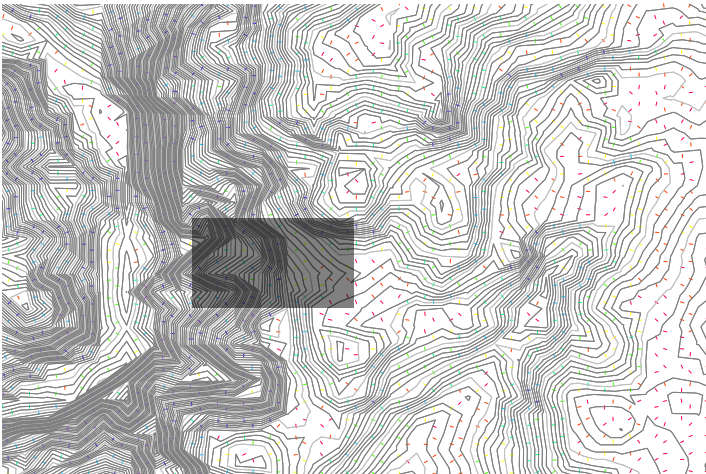
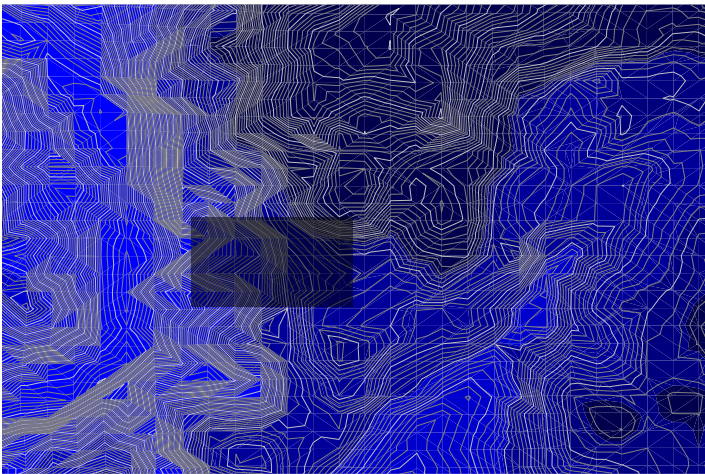
LAND USE



Land Use

Color	Property Type
	Federal Public
	Low Density Residential
	Medium Density Residential
	High Density Residential
	Commercial
	Parks and Open Spaces

TOPOGRAPHIC SURVEY

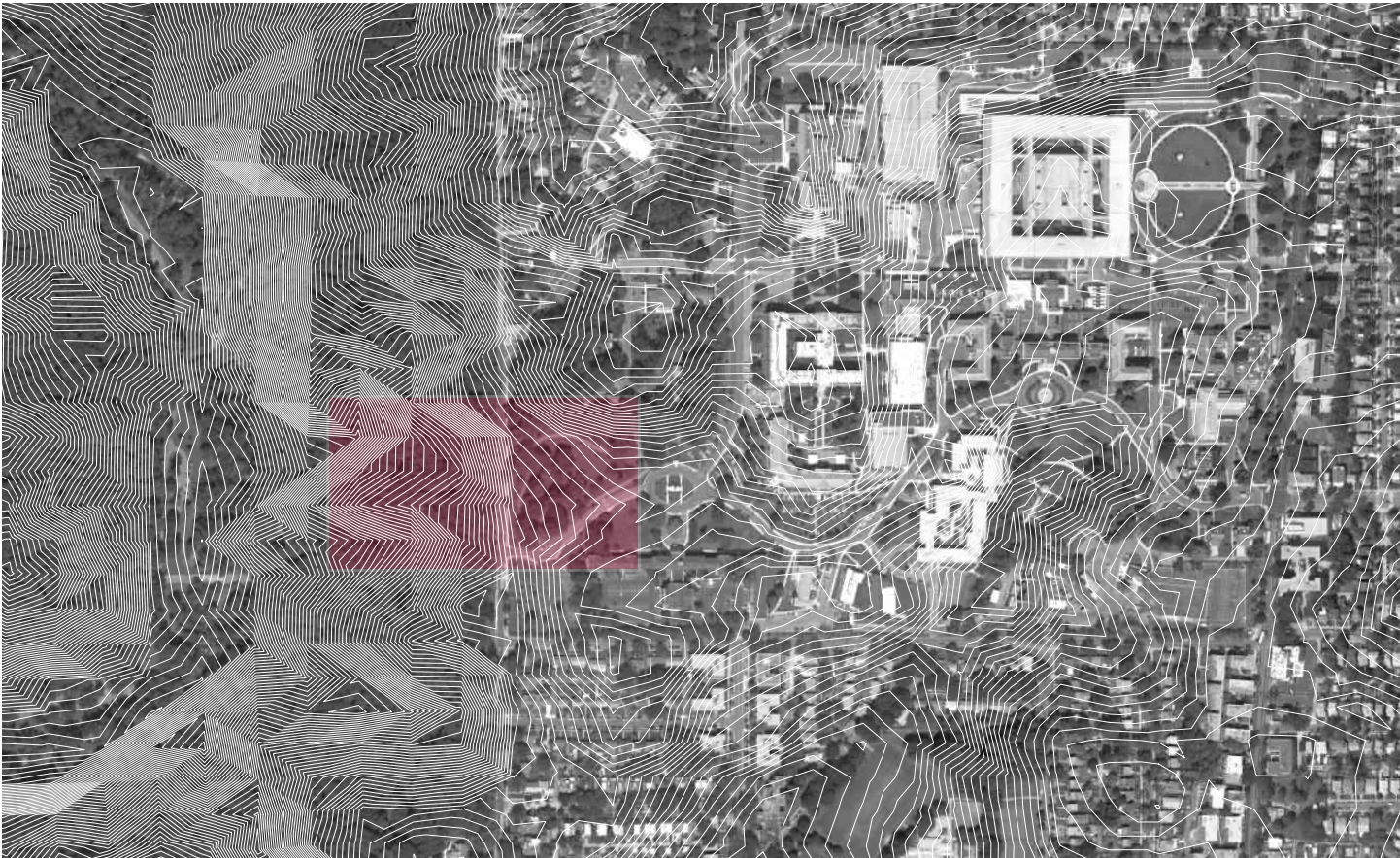


Elevations Table

Number	Minimum Elevation	Maximum Elevation	Area	Color
1	149.17	190.56	2435806.76	<div></div>
2	190.56	232.56	2388341.95	<div></div>
3	232.56	259.25	2363376.07	<div></div>
4	259.25	276.94	2357568.30	<div></div>
5	276.94	287.84	2492728.27	<div></div>
6	287.84	295.06	2216396.14	<div></div>
7	295.06	316.80	2248139.33	<div></div>
8	316.80	360.30	2257301.23	<div></div>

Slope Arrows Table

Number	Minimum Slope	Maximum Slope	Color
1	0.06%	2.27%	<div></div>
2	2.27%	3.73%	<div></div>
3	3.73%	5.14%	<div></div>
4	5.14%	6.88%	<div></div>
5	6.88%	9.44%	<div></div>
6	9.44%	12.97%	<div></div>
7	12.97%	18.96%	<div></div>
8	18.96%	255.27%	<div></div>





SITE RECONNAISSANCE



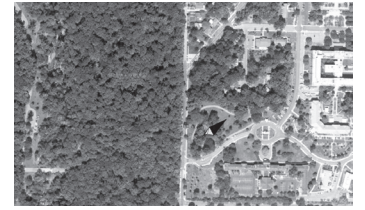




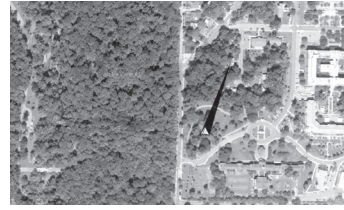
CLIMATE DATA



JANUARY



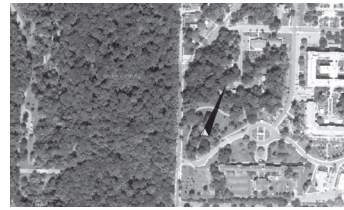
JULY



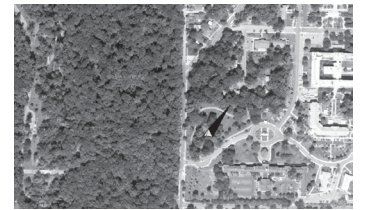
FEBRUARY



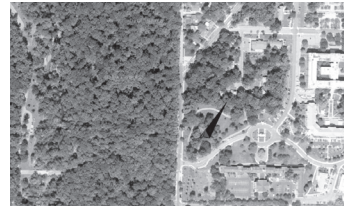
AUGUST



MARCH



SEPTEMBER



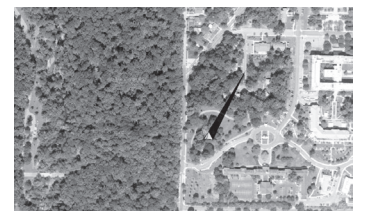
APRIL



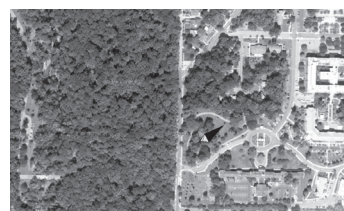
OCTOBER



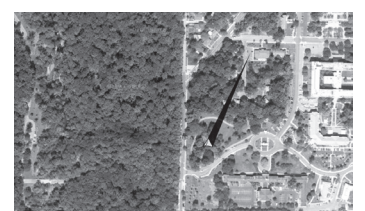
MAY



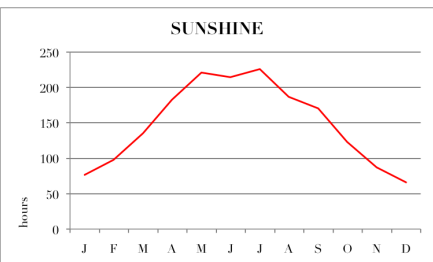
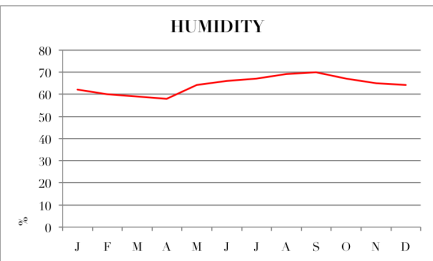
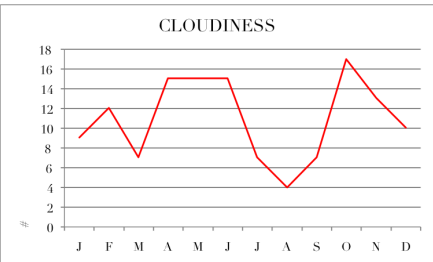
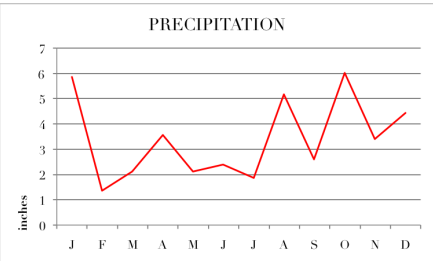
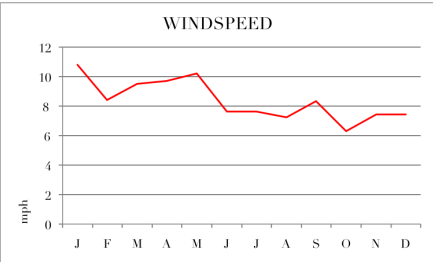
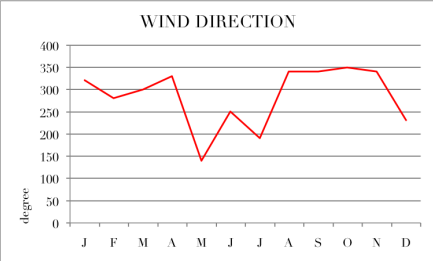
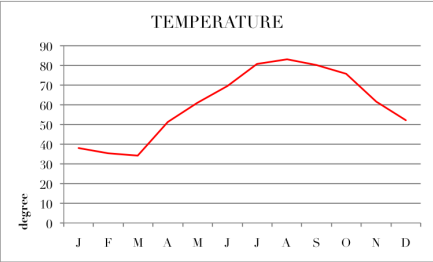
NOVEMBER



JUNE



DECEMBER



PROGRAM RE

QUIREMENTS

SPACE ALLOCATION (sq. ft)

Entry Ramp East - 12,124

Entry Ramp South - 9,247

Lower Terrace - 37,210

Upper Terrace - 38,010

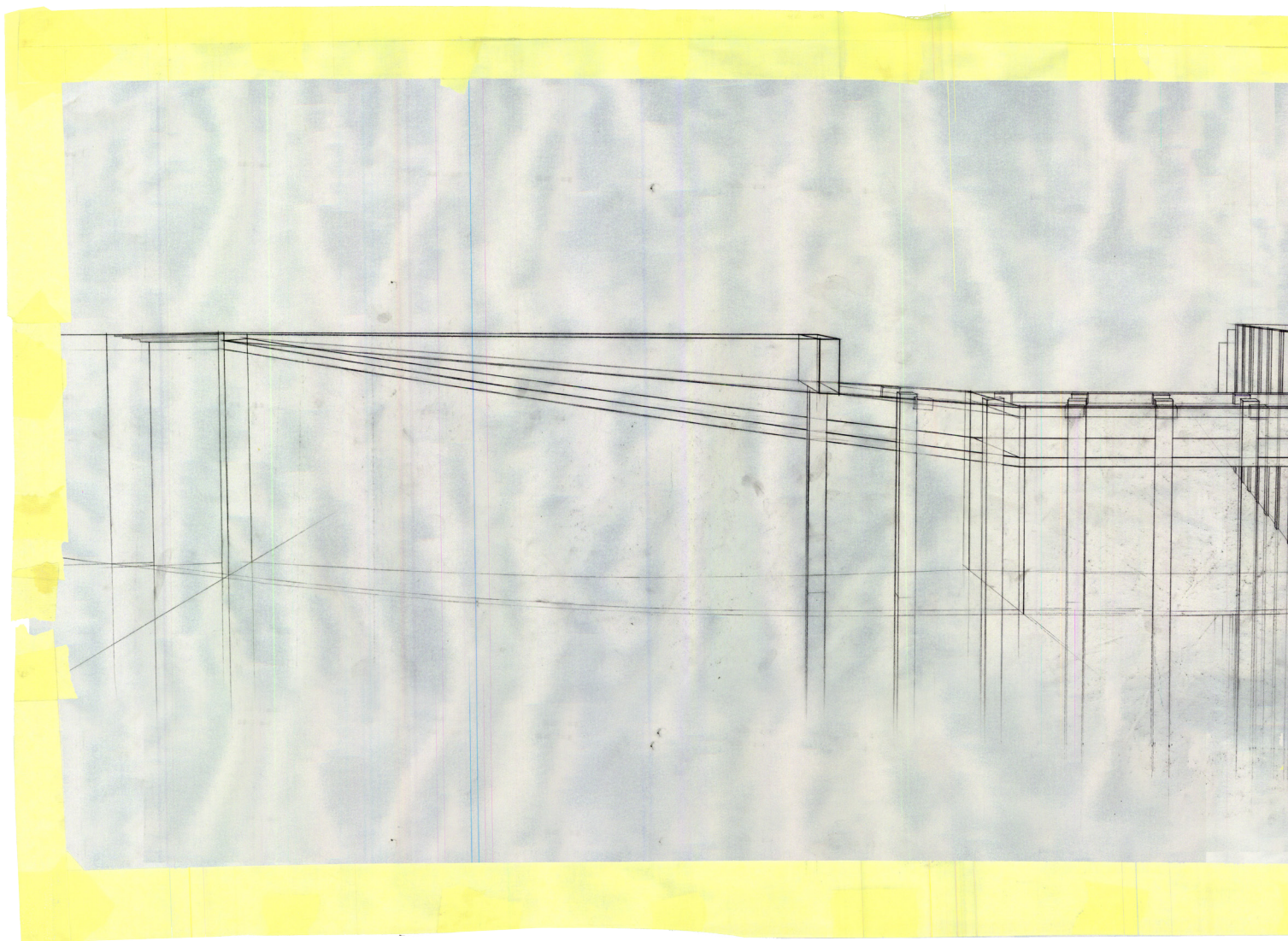
Large Swimming Pool - 25,477

Heated Pool - 6,317

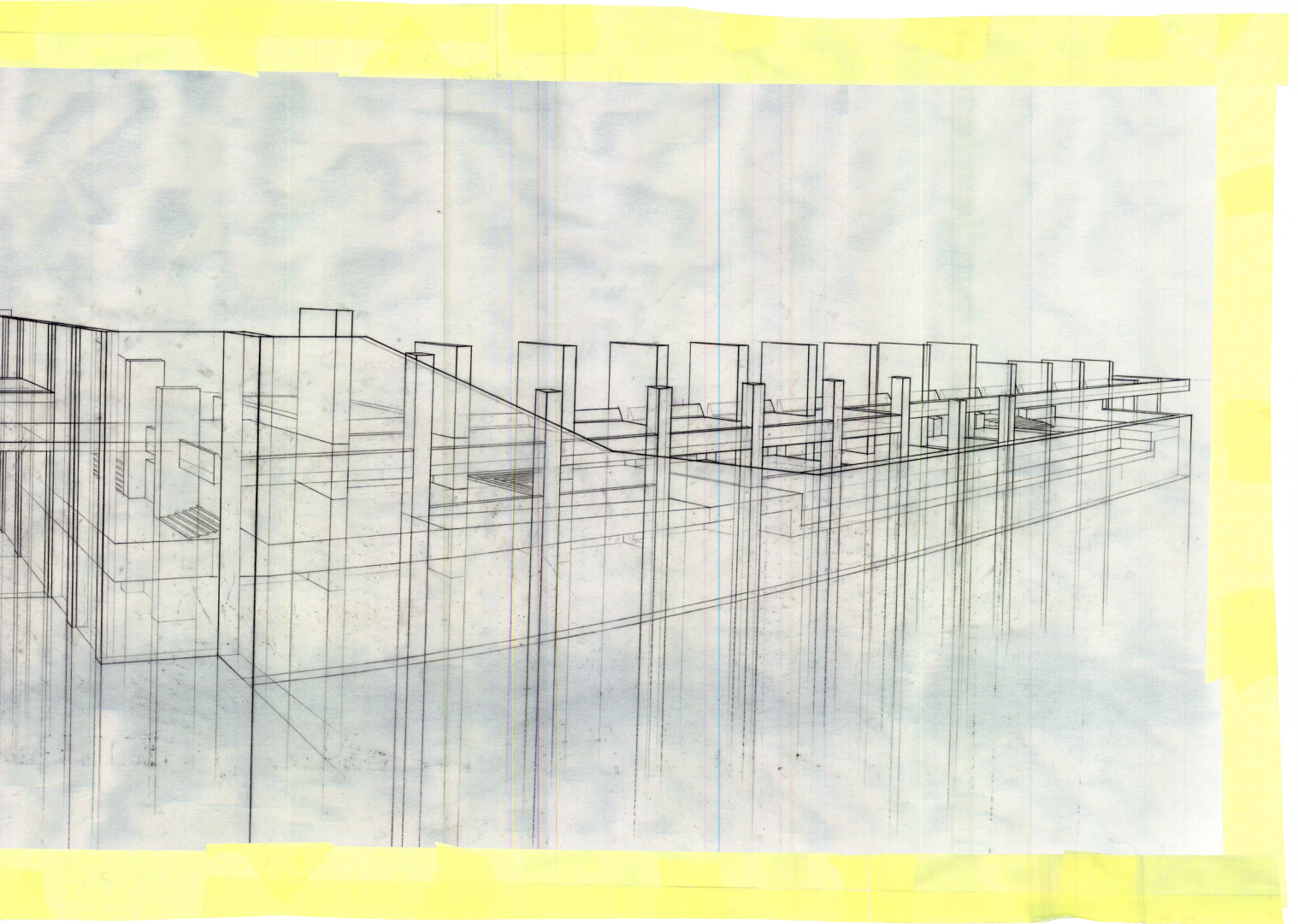
Locker Room - 1,884

Mechanical - 2,460

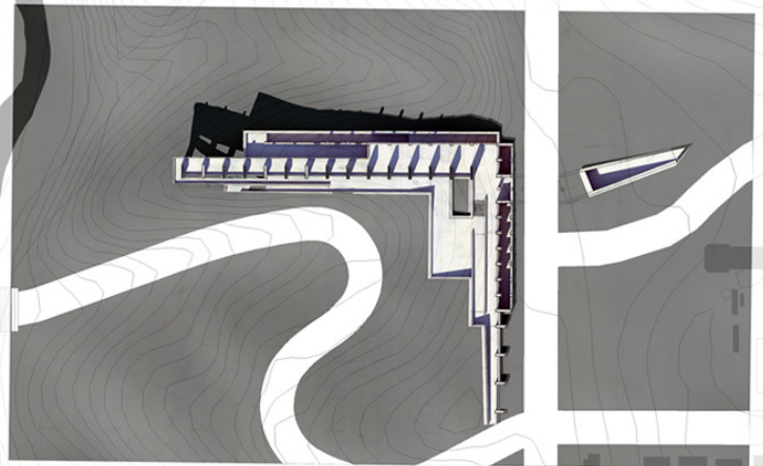
Total - 132,729 sq. ft



PROCESSING
LINES :



E V O K I N G A C R I T I C A L
C O N S C I O U S N E S S I N
T H E P R O D U C T I O N O F
A R C H I T E C T U R A L R E P R E S E N T A T I O N

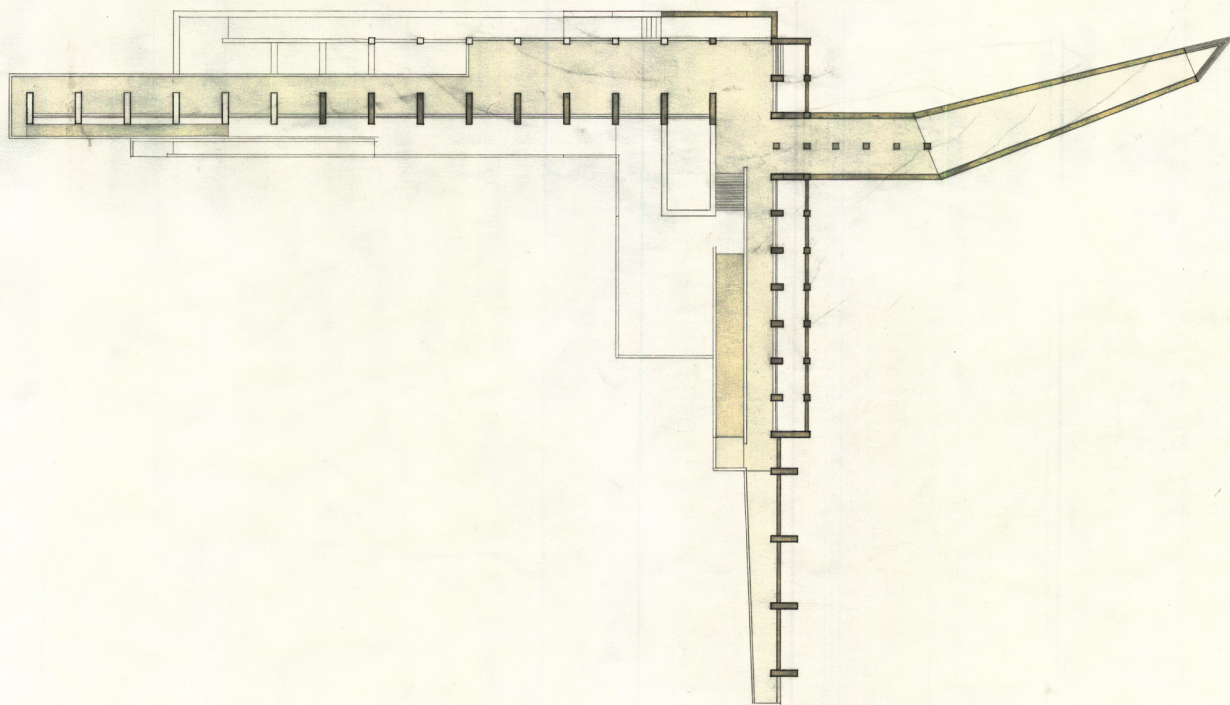


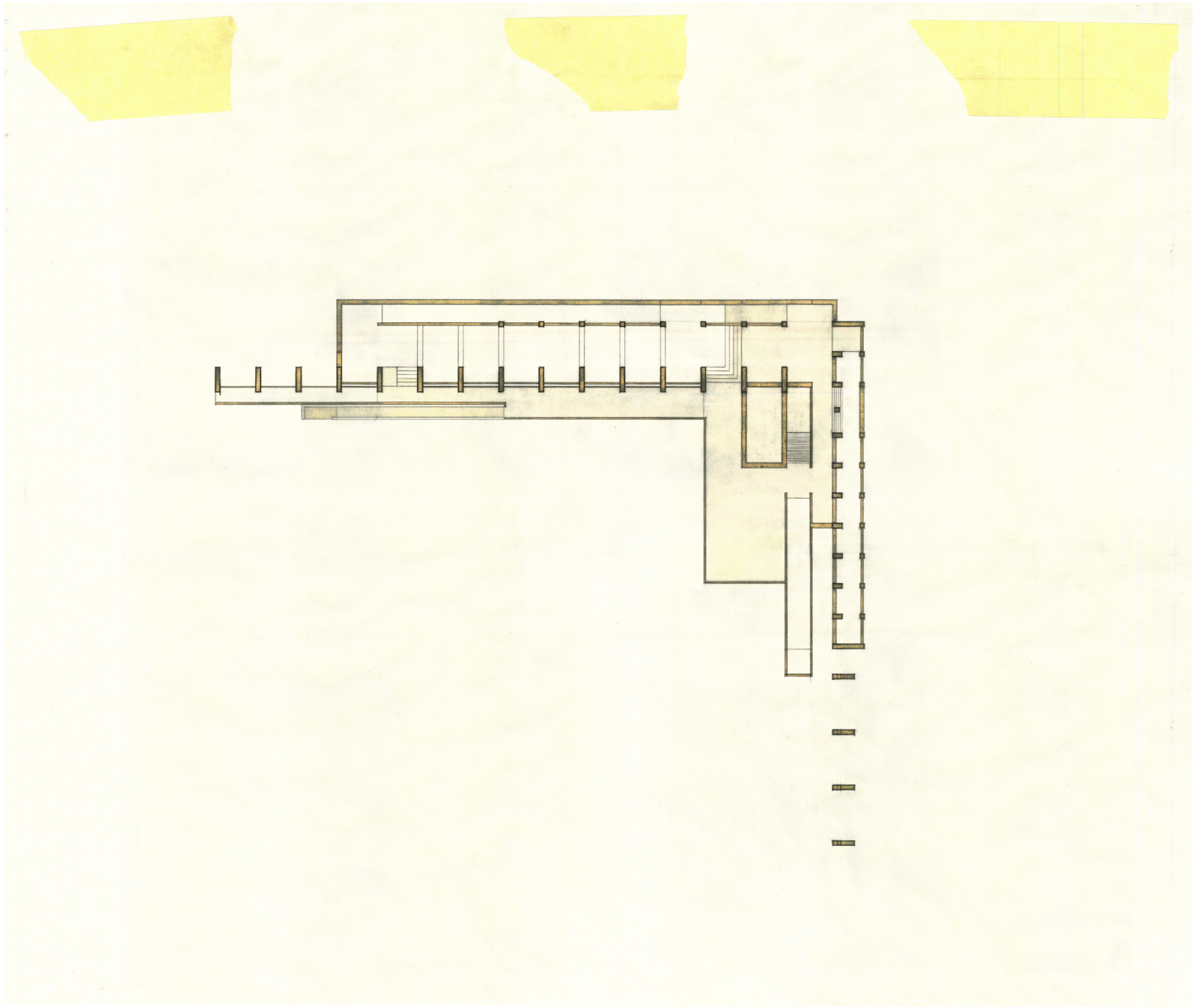
ROCK CREEK PARK
WASHINGTON, DC

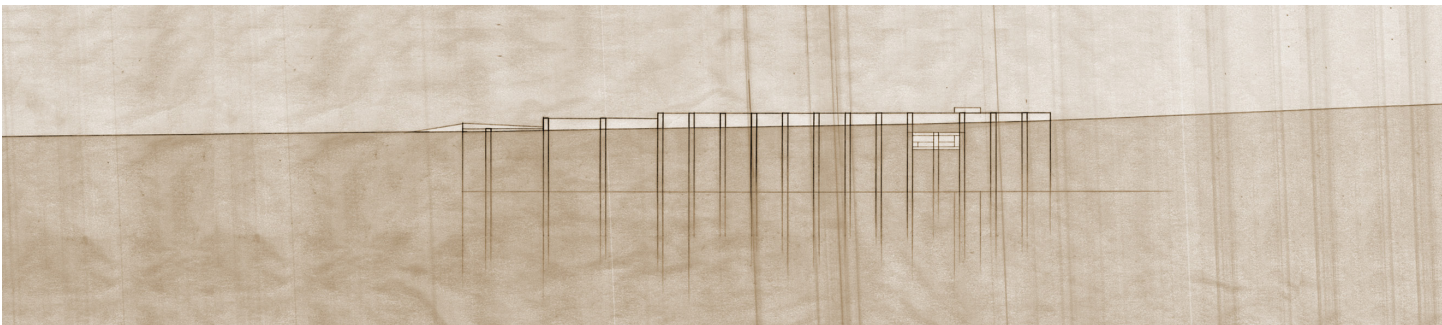
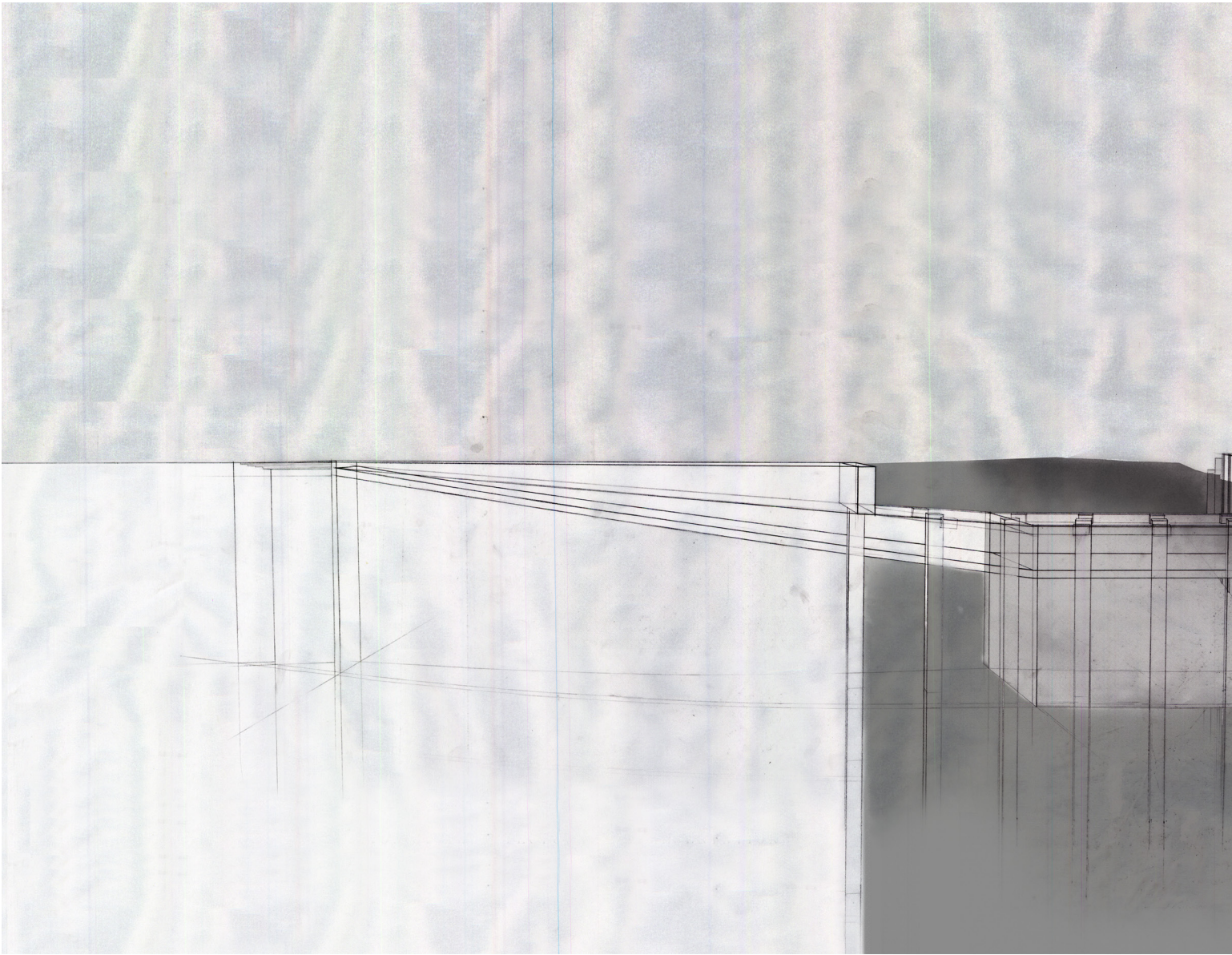
ARCH 772 DESIGN THESIS - SPRING 2012 - MIKE DAWSON
LEAD HOLDER - GOOGLE SKETCHUP - MAXWELL RENDER - ADOBE PHOTOSHOP

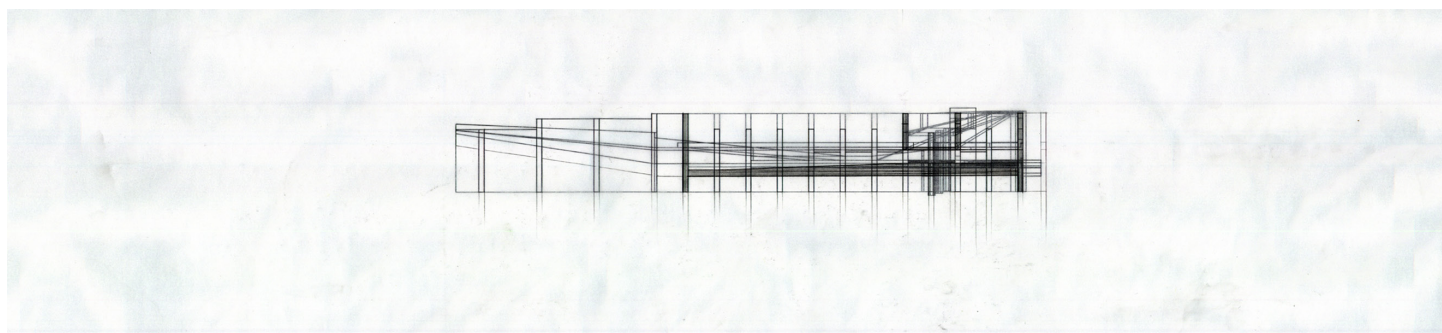
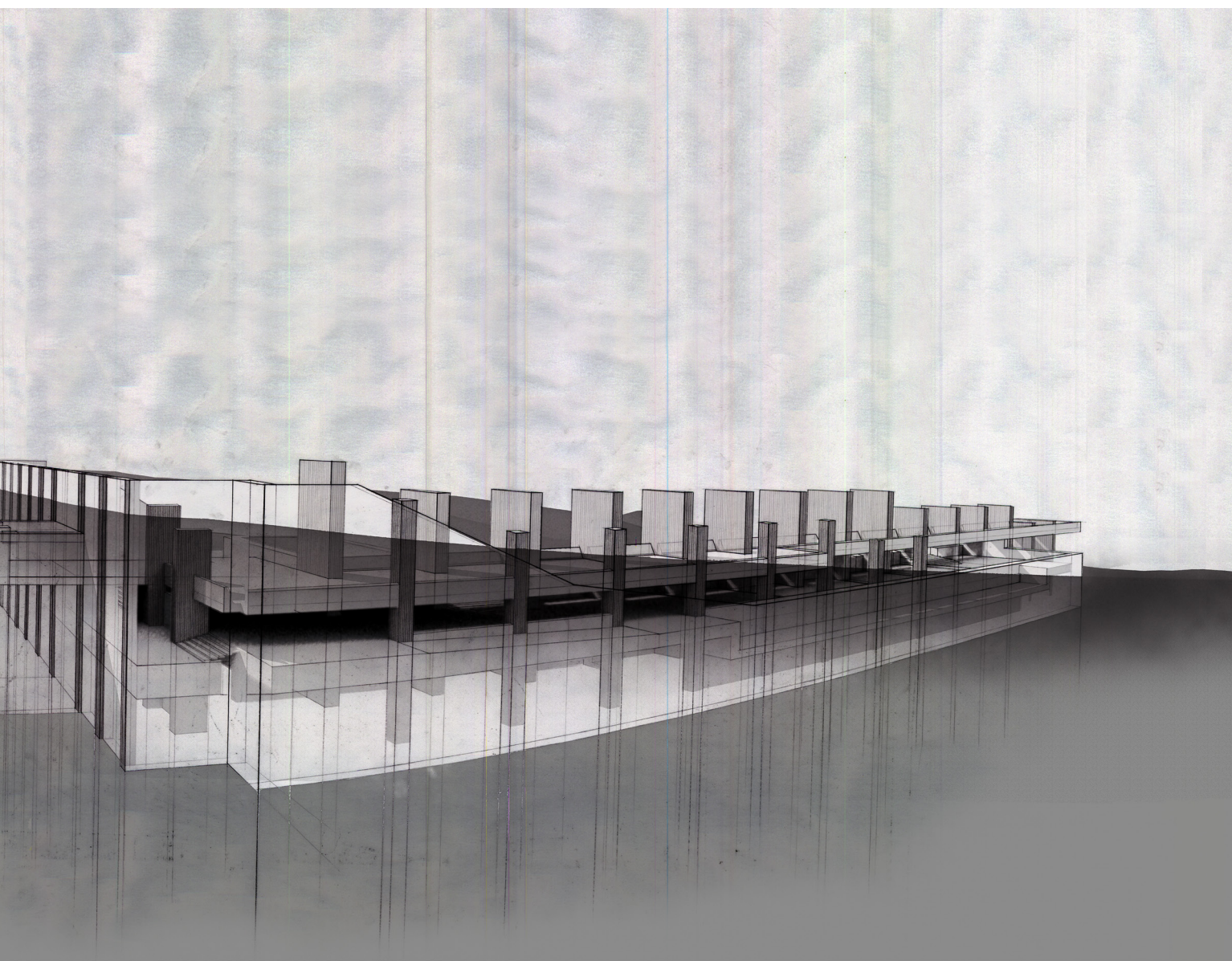


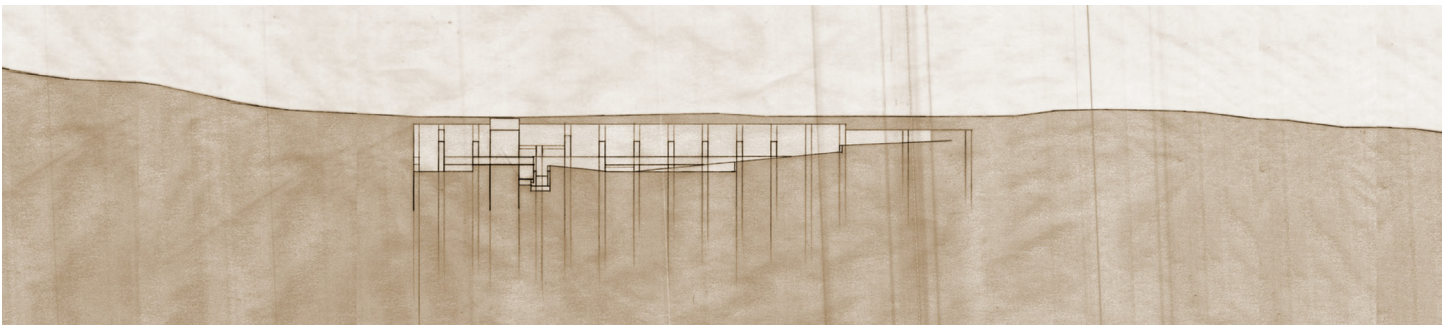
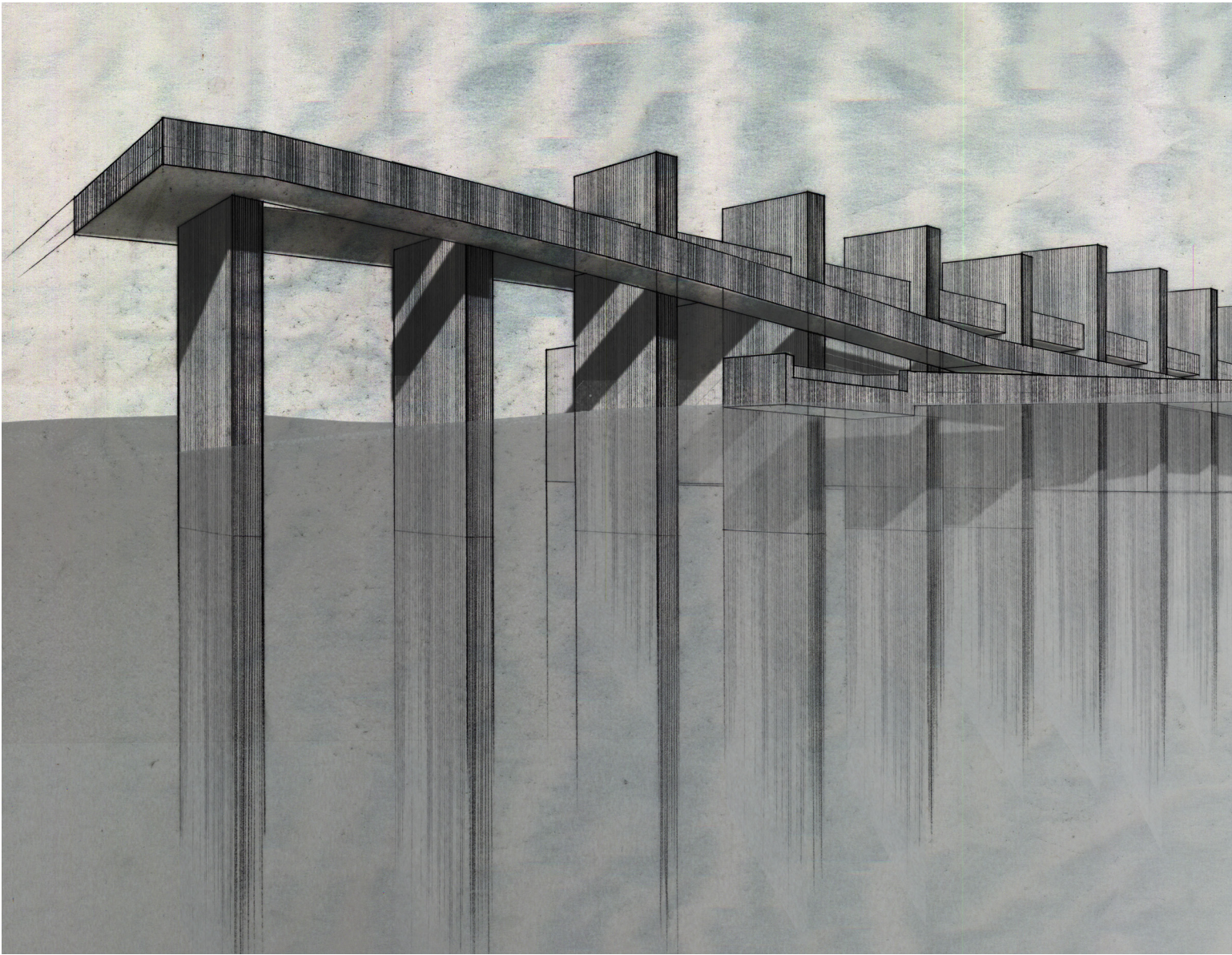
N - REGIN SCHWAEN

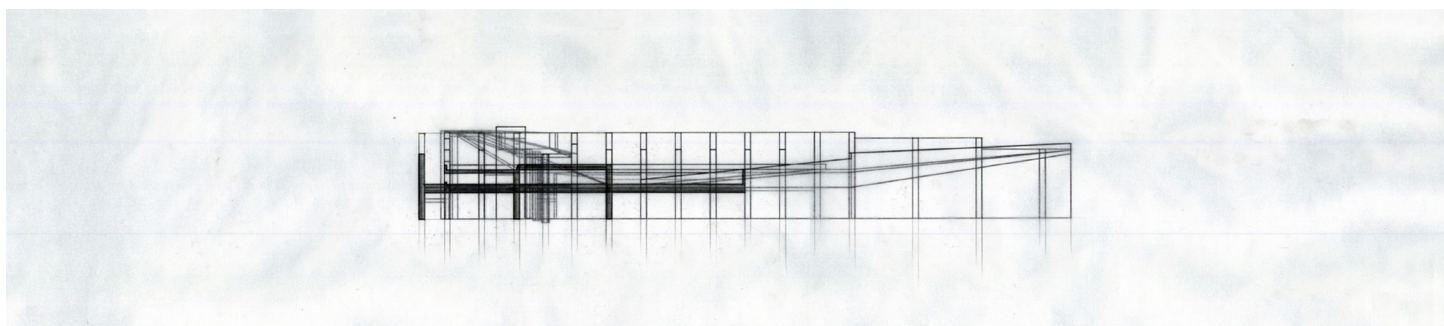
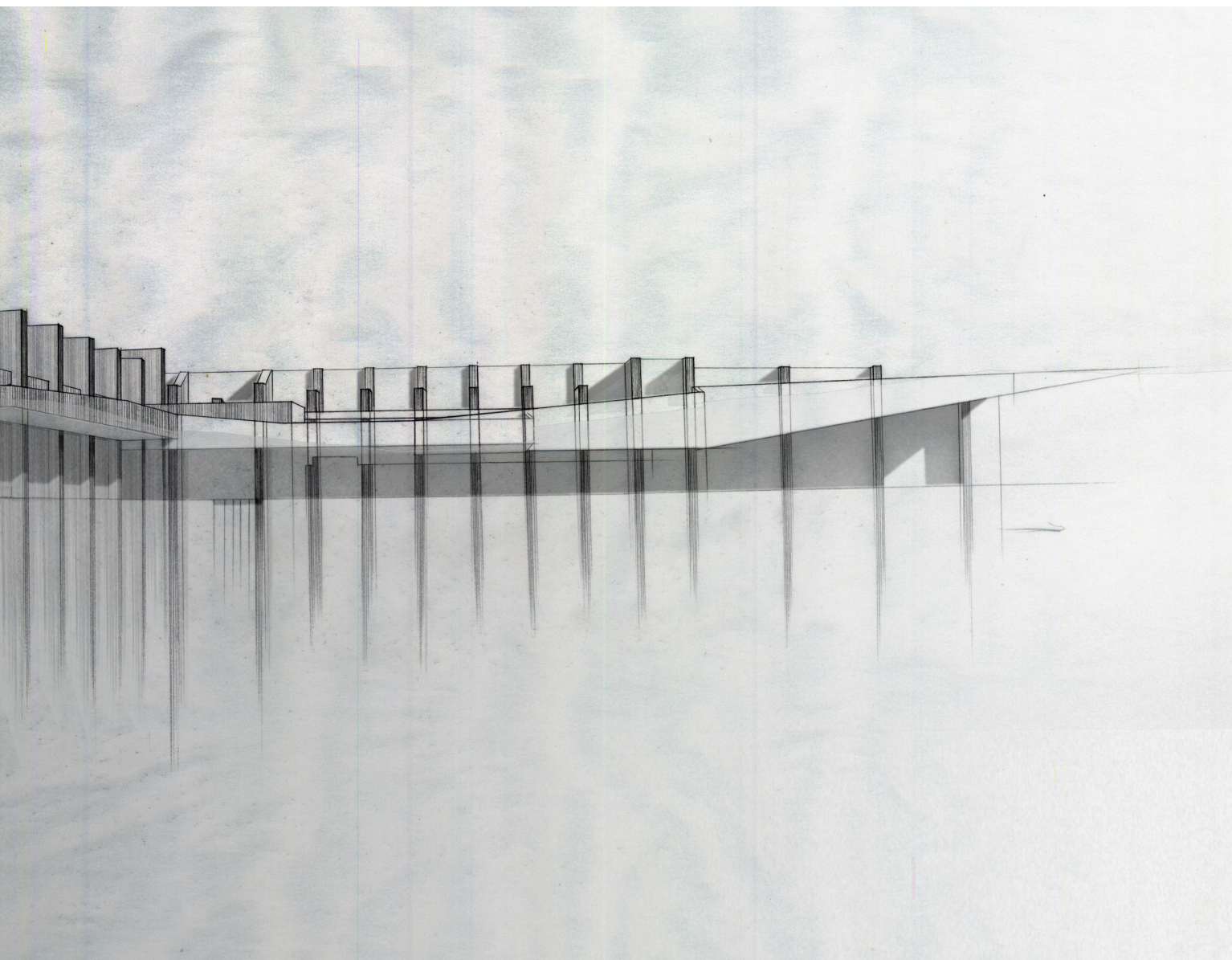


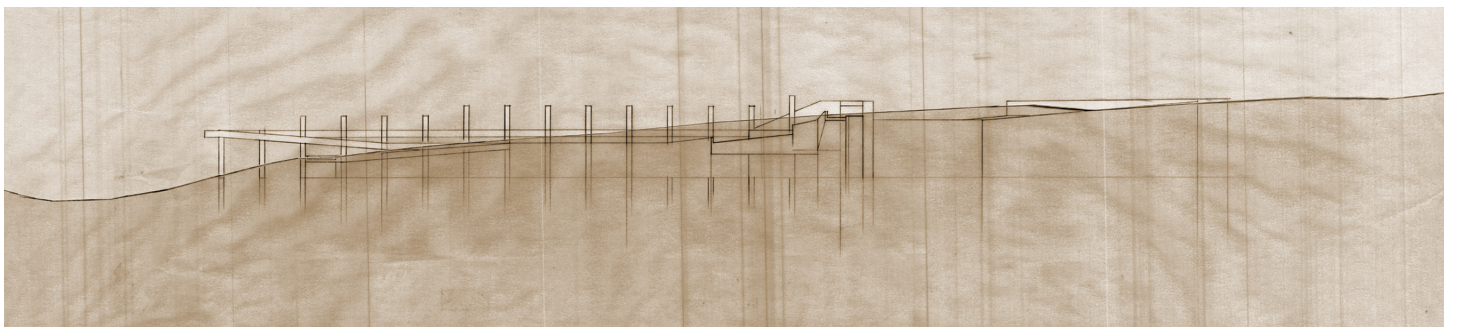
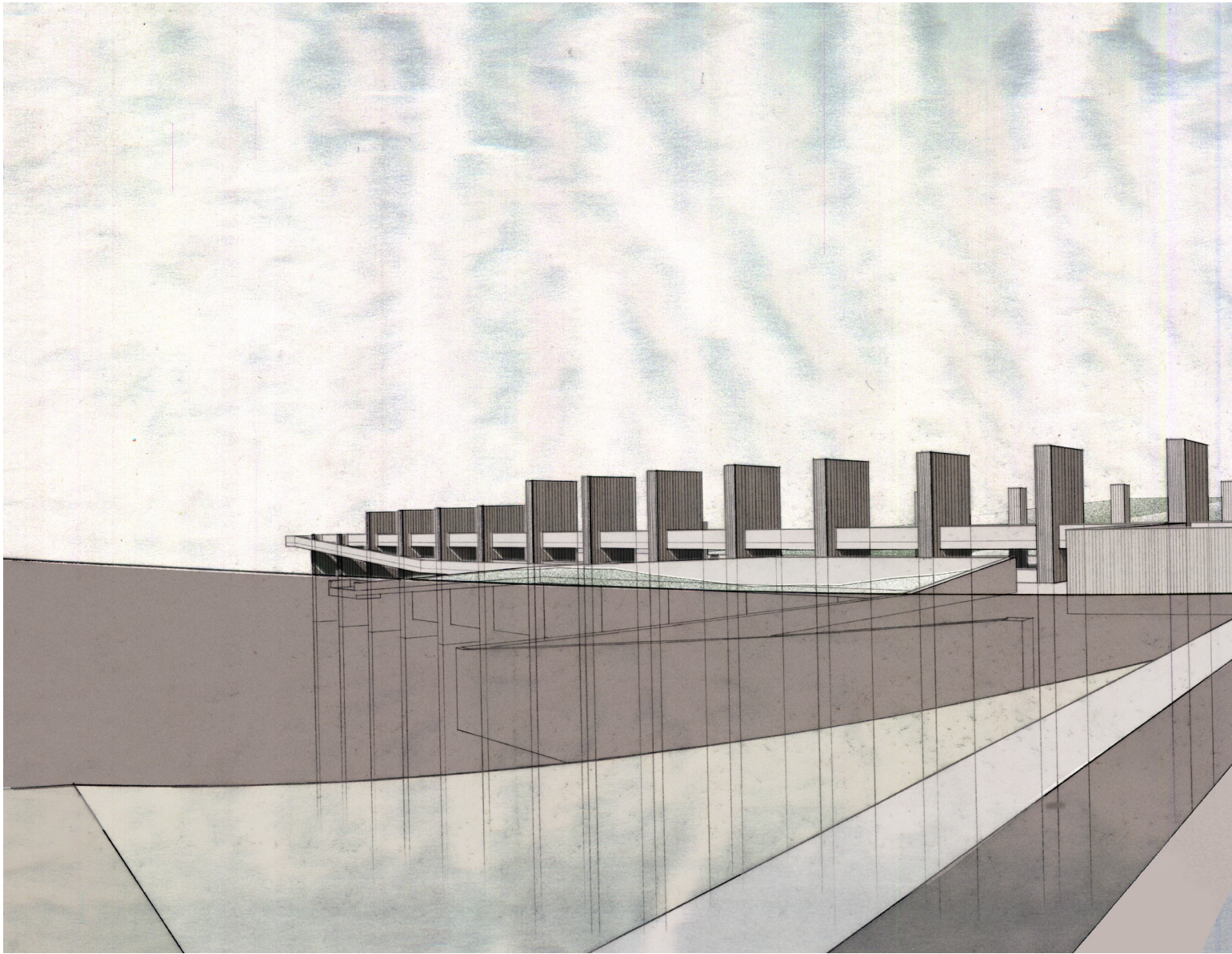


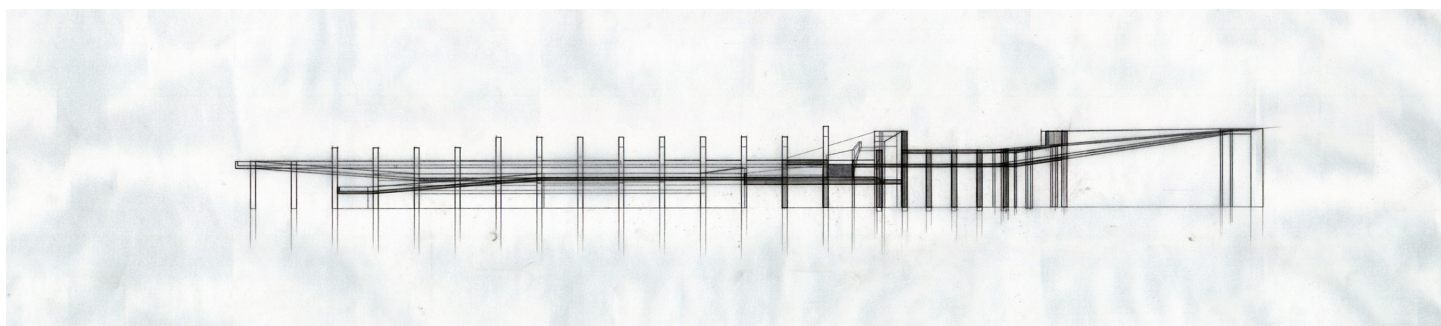
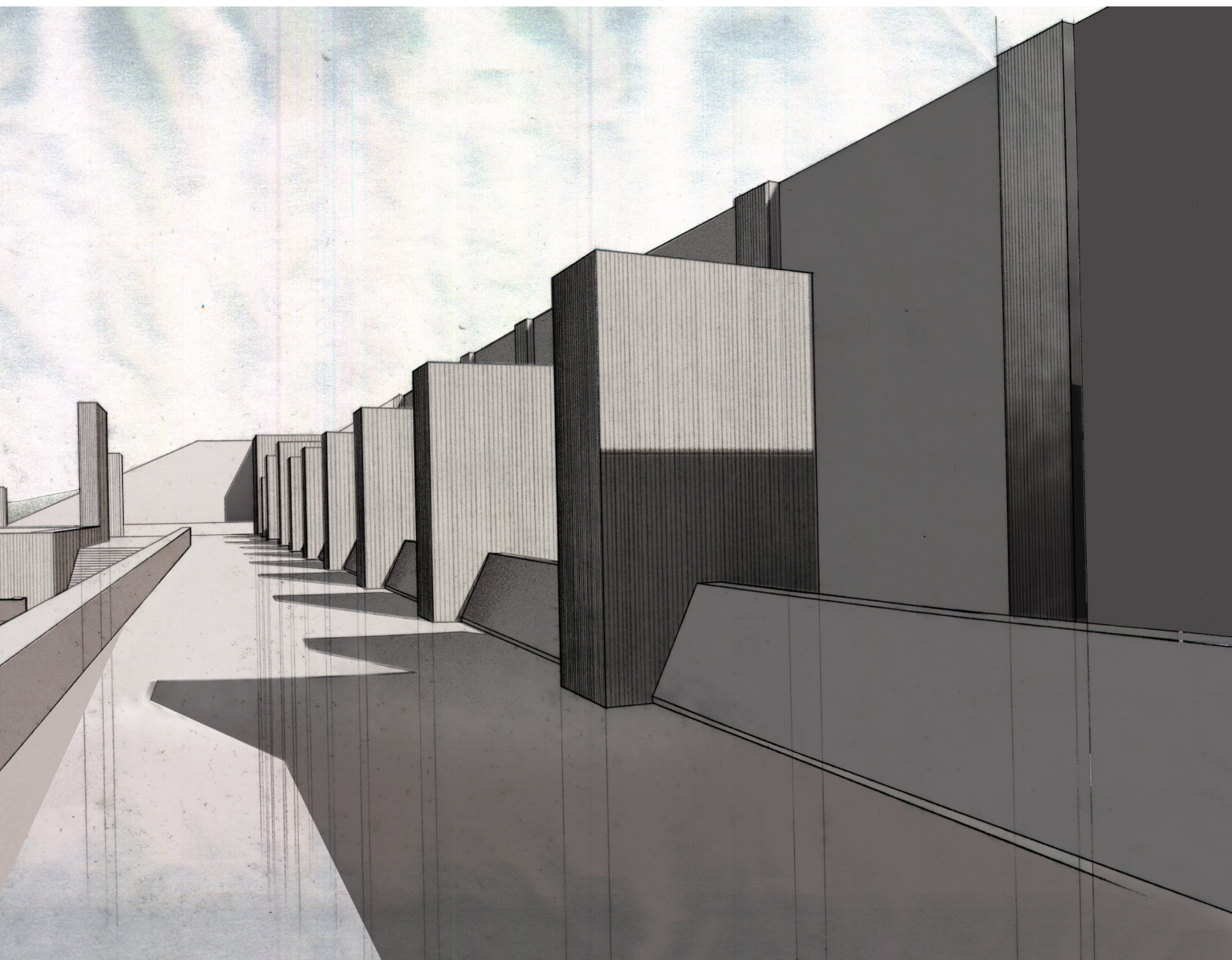


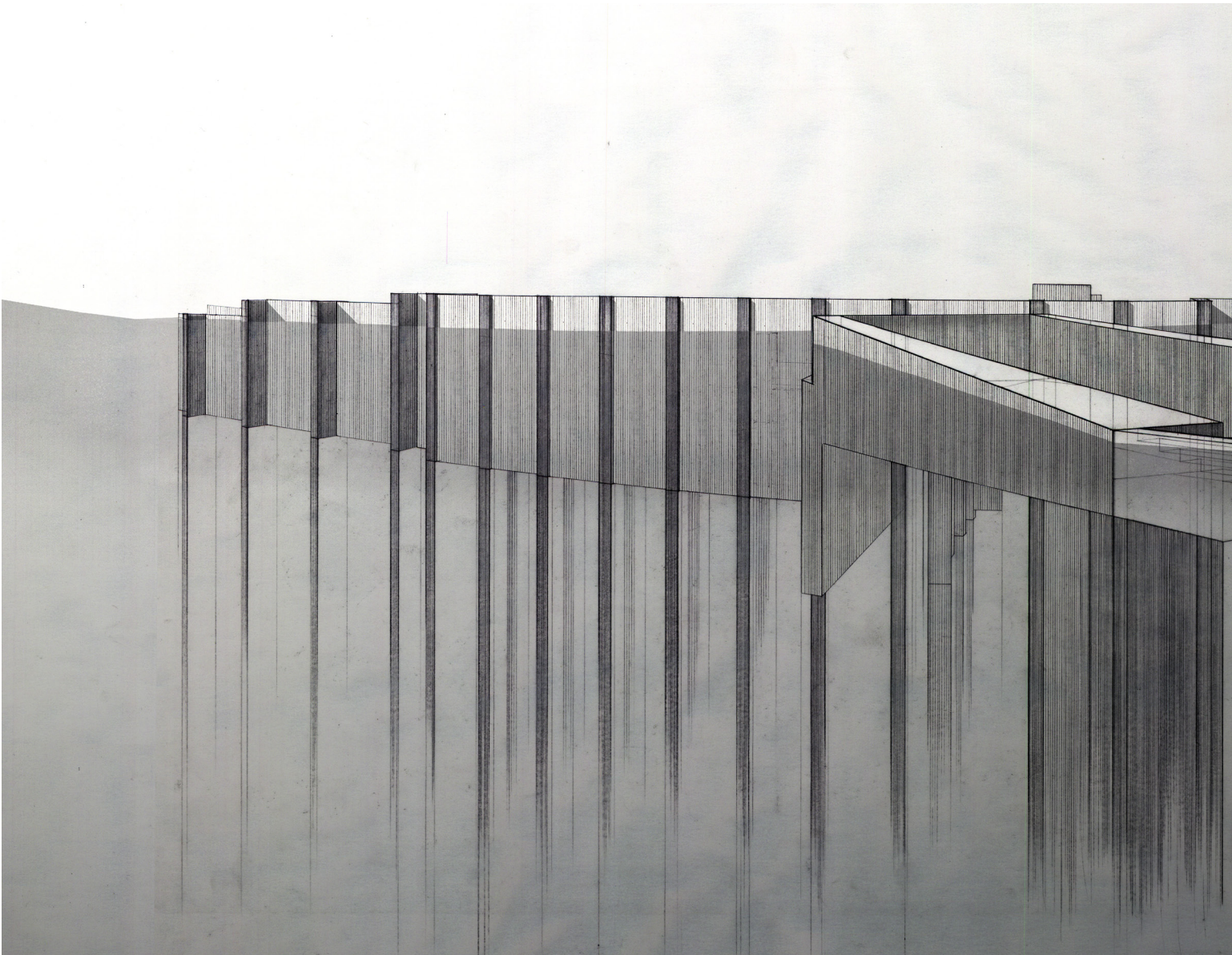
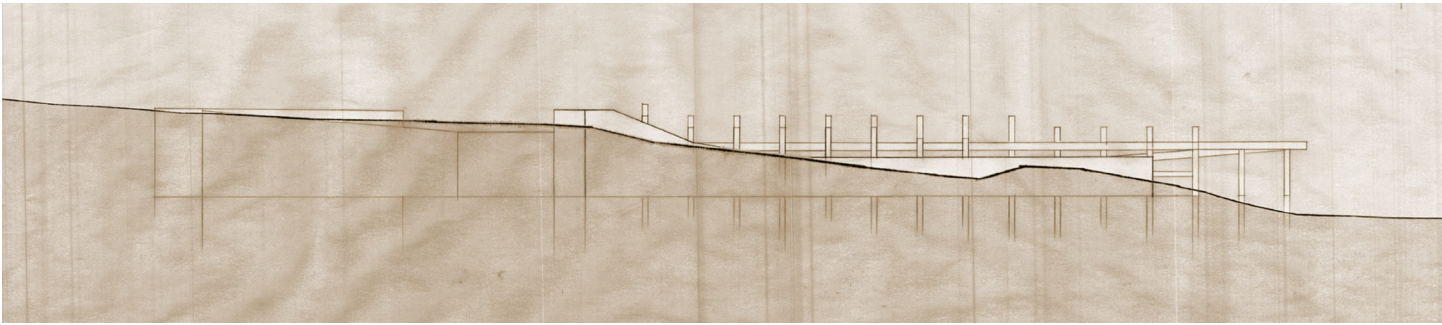


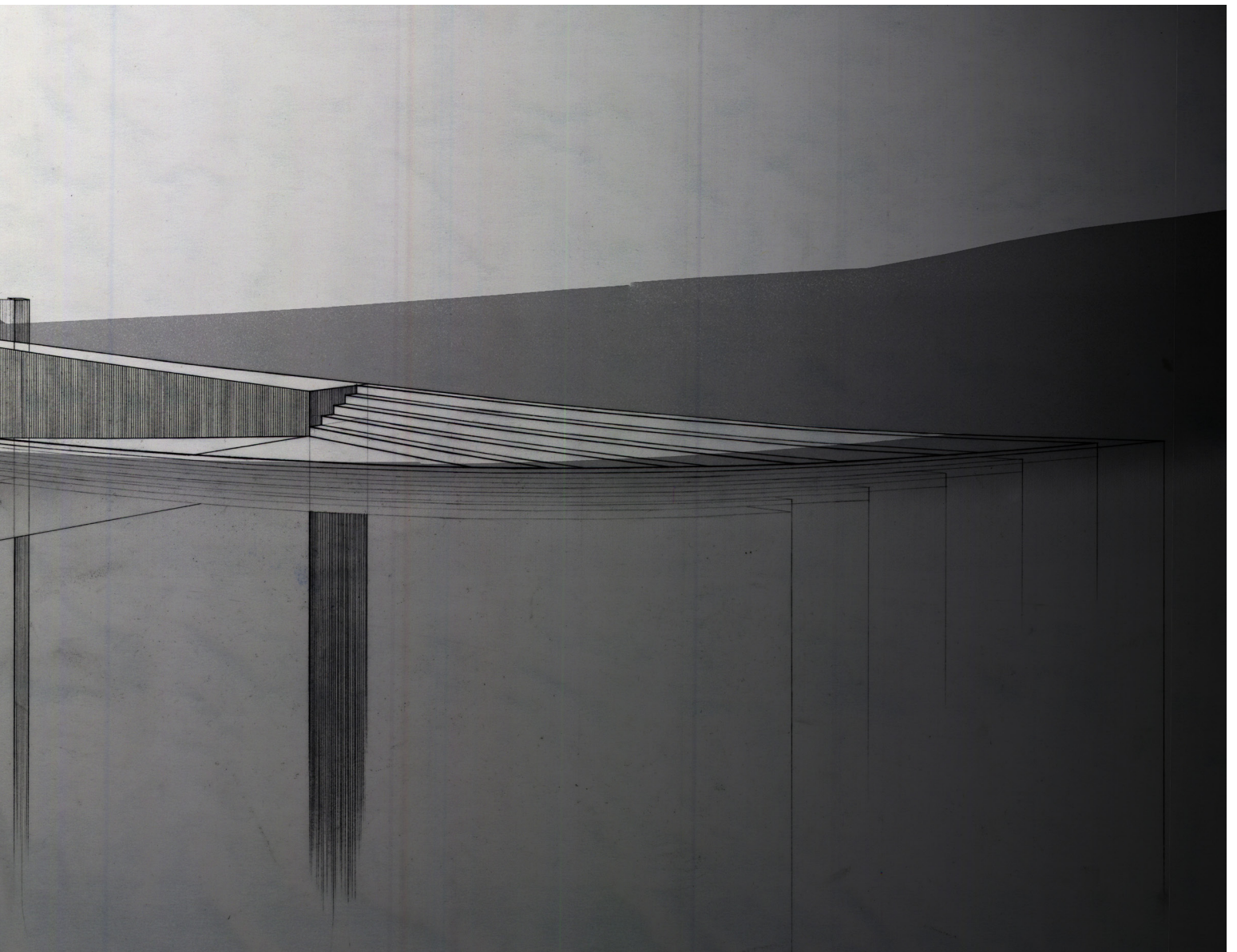
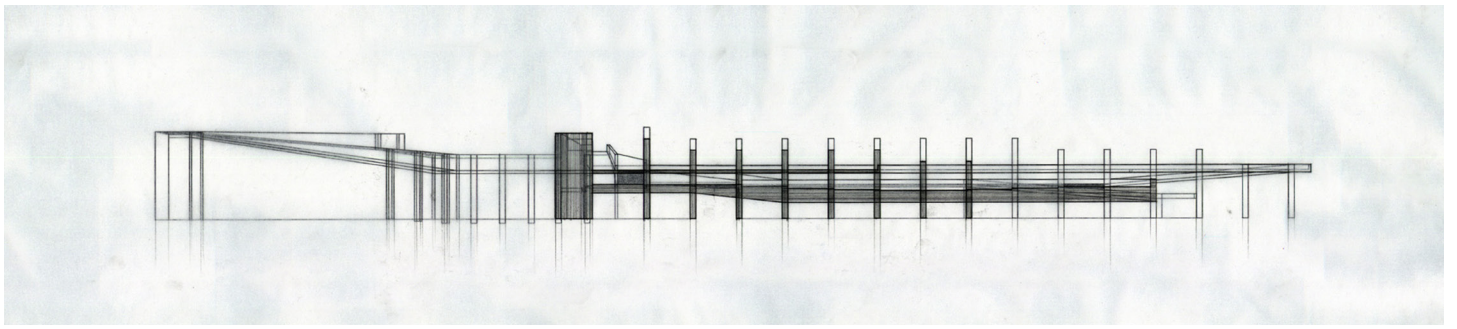




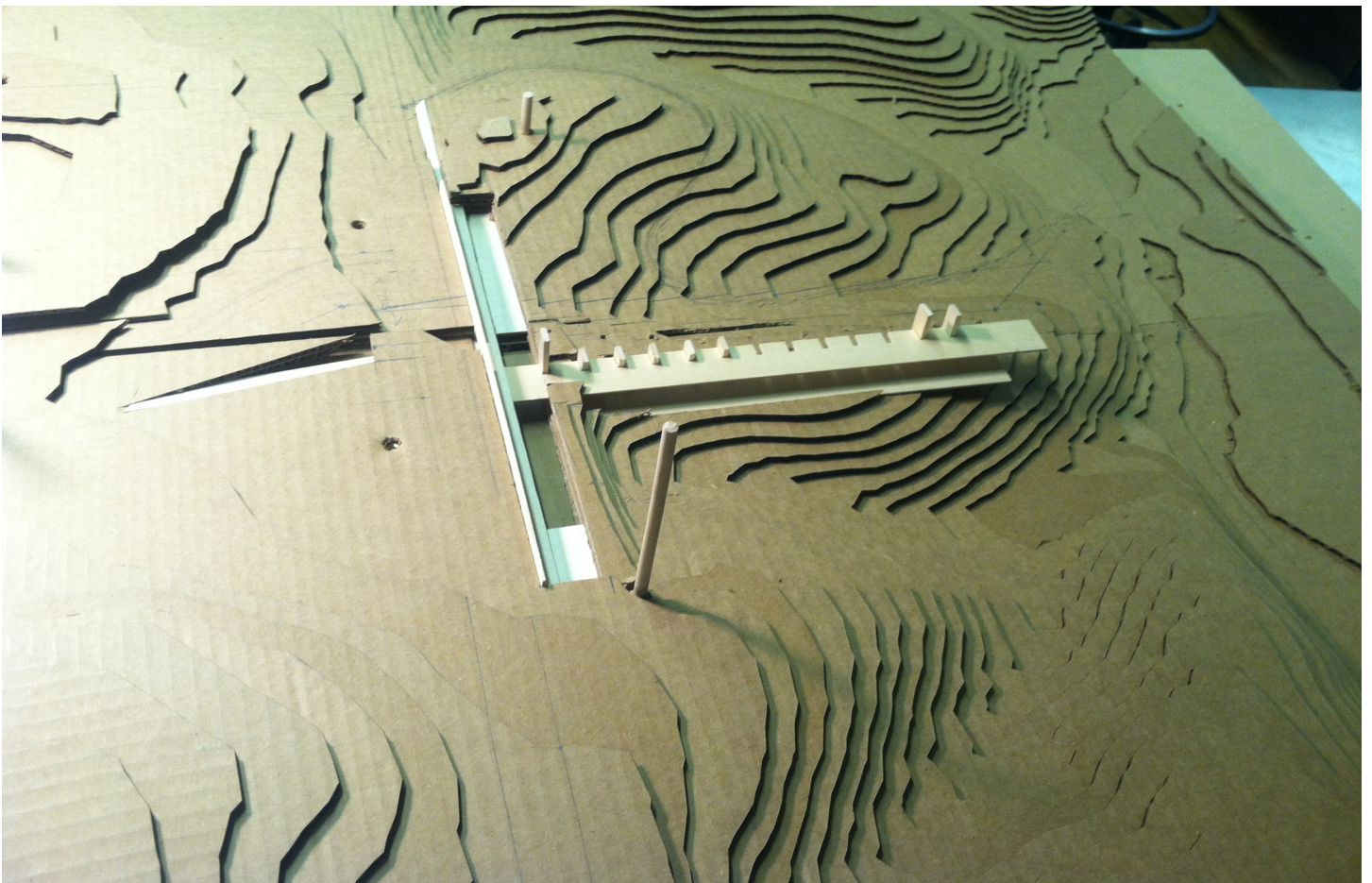
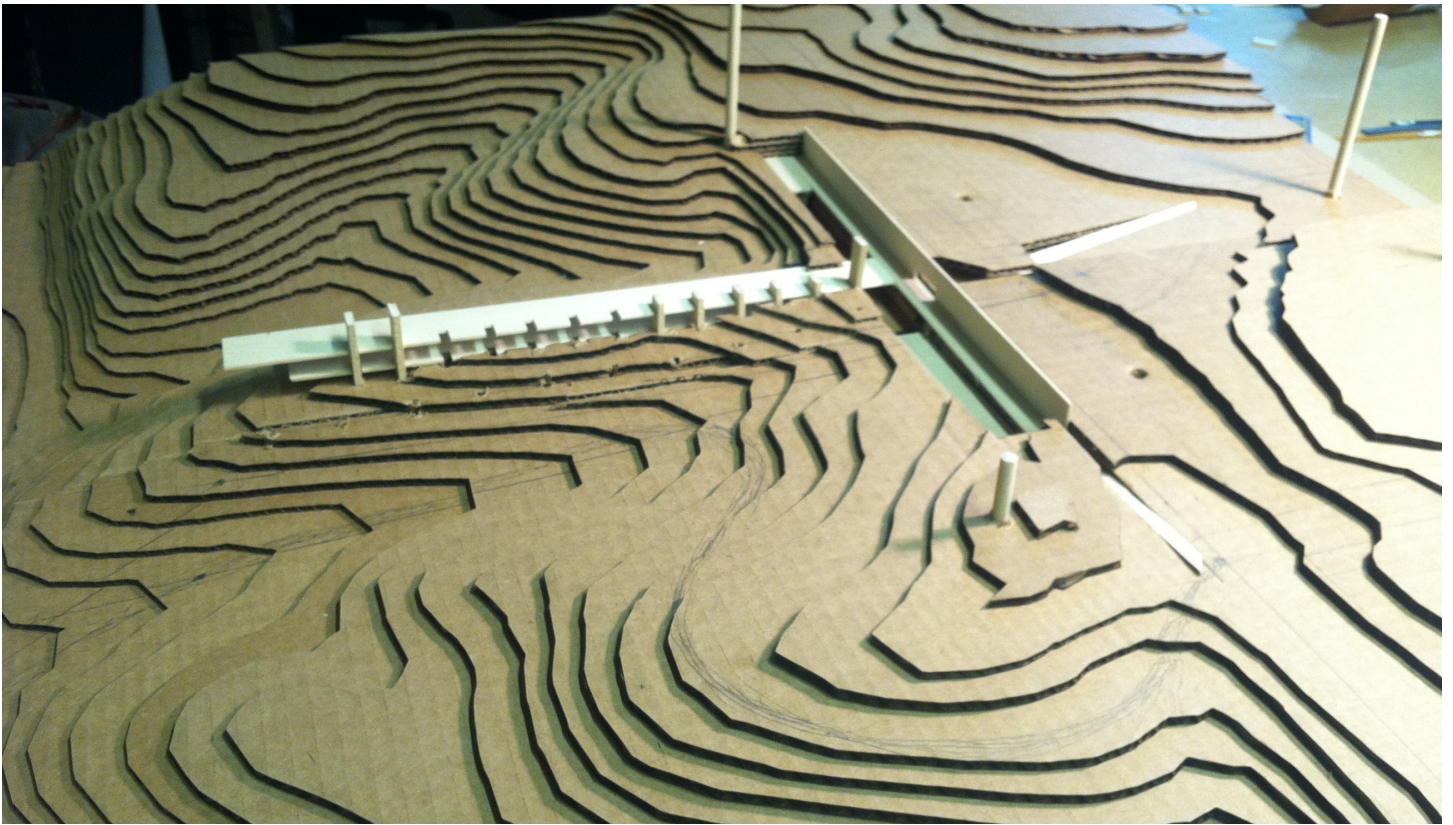












REFERENCES

Aristotle, Poetics.

Baudrillard J., Simulations.

Heidegger, M. The Question Concerning Technology.

Killory, Christine, and Davids René. Details in Contemporary Architecture. New York: Princeton Architectural Press, 2007. 207. Print.

Kirk NT. The Development of Amputation, An Introductory Survey. In: Vasconcelos E, Modern Methods of Amputation. New York: The Philosophical Library of New York, 1945.

Perez-Gomez A., Architecture and the Crisis of Modern Science.

Merleau-Ponty M., The Primacy of Perception.

Merleau-Ponty M., The Phenomenology of Perception.

Merleau-Ponty M., The Visible and the Invisible.

Fjeld, Per Olaf. Sverre Fehn : The Thought of Construction. New York: Rizzoli,, 1983. 192. Print.

Scott, Felicity D. Architecture or techno-utopia : politics after modernism. Cambridge: MIT Press, 2007. 347. Print.

Pallasmaa, Juhani, and First . The Eyes of the Skin : Architecture and the Senses. Chichester: Wiley-Academy,2005. 80.

Slocum D. An Atlas of Amputations. Philadelphia: Mosby, 1949

PERSONAL INFORMATION

MIKE DAWSON
1719 6th St. S.
Fargo, ND 58103
701-371-5860
Fargo, ND

